



Queen Margaret University
EDINBURGH

**EXPLORING CLINICAL RESEARCH NURSES'
EXPERIENCES OF WORKING WITH CLINICAL
NURSES**

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requirements for the degree of Professional
Doctorate**

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Abstract

Introduction

Over the last 10-15 years the role of the clinical research nurse (CRN) has evolved, with many CRNs now participating in the design, planning, analysis and dissemination of research. However, from the literature it is evidenced that despite this, CRNs have difficulties in developing a positive working relationship with clinical (ward-based) nurses. Additionally, previous literature identified that liminality, isolation, perceptions of CRNs and issues related to the transition from a clinical nurse to a CRN appeared to be important. However, the experiences of CRN's have never been fully explored in this context.

Research Question

How do CRNs make sense of their relationship with clinical nurses?

Methodology

A qualitative approach, using interpretative phenomenological analysis, was utilised for this research. This approach allowed an exploration of the lived experience of the CRNs interactions with clinical nurses and generated real-life information on their relationships.

Methods

Semi-structured interviews were conducted with ten CRNs. The rich data gathered from these informed a deeper understanding of the relationships between CRNs and clinical nurses.

Analysis

The interviews were transcribed by the researcher and analysed individually. Once this process was completed, the findings were combined to develop over-arching super-ordinate themes. This followed the process suggested by Smith, Flowers and Larkin (2009).

Findings

New understanding emerged from this study, including perceptions of harm, particular issues relating to CRNs from clinical research facilities, negative impacts of poor relationships with clinical nurse specialists and how relationships with doctors can impact on how CRNs are perceived. Additionally, theoretical constructs including duality, dramaturgy and injurious misconception were also identified and explored.

Conclusion

The study indicated that CRNs value their relationship with clinical nurses. This relationship assists in conducting successful clinical research and confirming the importance of the CRN role. However, there appear to be some difficulties that should be addressed, to further enhance this relationship for the benefit of patients, CRNs and the clinical nurses.

Glossary/Acronyms

Clinical Nurse – Staff or charge nurse working in a clinical setting (usually ward or clinic).

Clinical Research Facility (CRF) – Centralised research unit, usually consisting of clinical rooms, specialised support, research training and specially trained clinical research staff.

Clinical Research Nurse (CRN) – Any nurse who is employed principally to undertake/facilitate research within the clinical environment. This can include a variety of nursing roles but all share the common feature that research is a central part of their employment. The CRN may be a co-investigator, but generally facilitates the effective/safe delivery of research, rather than leading it. The CRN can be involved in all types of clinical research projects.

International Association of Clinical Research Nurses (IACRN) – The International Association of Clinical Research Nurses is a professional nursing organisation. Its purpose is to define, validate and advance clinical research nursing as a speciality practice and to support the professional development of registered nurses who directly or indirectly impact the care of clinical research participants.

Principal Investigator (PI) – individual with overall responsibility for a clinical research project on a particular site. Can delegate duties, but has responsibility to ensure that staff are acting in accordance with the protocol and ethical/regulatory guidelines

Scottish Research Nurse and Coordinator's Network (SRNCN) – SRNCN provides a communication forum whereby research nurses, coordinators and others working in the field of Clinical Research in Scotland can network and share best practice.

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Chapter one - Introduction

1.0 Background and rationale

There has been an enduring understanding that clinical practice should be founded on sound research-based evidence, facilitating the provision of high quality patient care (Sackett 1998, NHS Research Scotland 2015). However, for this to be realised, relevant research should be conducted in an optimal environment, where researchers and clinicians work closely to a common goal (Gerrish and Lacey 2010). This is especially important in the UK National Health Service (NHS), where effective communication and a positive team culture can empower staff and help to foster a positive working environment (Martin et al 2013, Coughlin 2014, Kulkarni 2014).

NHS Research Scotland (2015) state that research is a core NHS service and should be integrated into practice, to make Scotland a global centre for clinical research excellence. The benefits of this integration can be to improve the evidence base for care, to gain access to equipment and treatment or to improve outcomes and ensure that leading researchers remain in the UK (Medical Research Council 2014). Furthermore, it has been established that for each £1 invested in research there is a financial return equivalent to 25p per year, in perpetuity (Wellcome Trust 2017).

Key to this success are the working relationships in the NHS. In most instances these are positive for staff, though Puga, Stevens and Patel (2013) state that this is a complex picture, with many factors influencing this dynamic. It is suggested that when relationships are positive, the working environment is much more productive and conducive to high quality research being undertaken (Johnson and Stevenson 2010, Houlston 2012, Hemingway and Storey 2013). However, on other occasions, working

relationships can be more nuanced, and positive experiences may be elusive (Roberts et al 2006, Lanter 2007, Rickard et al 2007, Connelly 2009, Rickard et al 2011, Lawton et al 2012, Smith et al 2015, Tillett 2015). Effective working relationships are crucial in research to assist in achieving the aims of the NHS and the UK/Scottish Governments. However, achieving these aims has proven problematic due to budgetary cuts, which may be further reduced following Brexit (Garaum, Mordoh and Sussex 2011, Lancet Oncology (editorial) 2016). Consequently, it is vital that research interactions are maximised in an attempt to ensure that resources are used effectively, data are credible and that research results are timely and on budget (McCabe and Sambrook 2014).

Clinical research nurses (CRNs) provide important support for clinical research and their role has expanded over a number of years (MacArthur, Hill and Callister 2014). Some CRNs report a positive working environment with an embedded research culture (Smith et al 2015, Tillett 2015). However, others have indicated that interactions with clinical nurses can be problematic, potentially resulting in sub-optimal working practices, isolation and a perceived lack of value of their role (Roberts et al 2006, Spilsbury et al 2008, Bell 2009, Roberts et al 2011, Houlston 2012). These reports of negativity are not unique to the UK, as international literature describes similar experiences (Catania et al 2011, Roberts et al 2011, Eastwood et al 2012, Matsumoto et al 2012, Smith et al 2015, Tillett 2015). However, this position lacks a systematic evidence base and often relies on anecdotal experiences.

To achieve positive research outcomes, efforts to develop and maintain a concordat relationship between clinical research nurses and clinical nurses are seen to be essential (Wrigley and Humphreys 2010, Hemingway and Storey 2013, Tillett 2015,

Smith et al 2015), otherwise there could be negative consequences for the overall clinical research endeavour (Spilsbury et al 2007, Bell 2009, Catania et al 2011).

1.1 Aim of study

This study set out to explore, and gain a deeper understanding of, CRNs' experiences of interactions and relationships with clinical nurses.

1.2 Motivation for the study: Personal and professional

The motivation for this study is driven from several sources. Firstly, the limited literature that is available indicates that the working relationships that CRNs have with nursing colleagues can vary and that the nature of these interactions may contribute to successful research delivery. Secondly, previous exploration of the CRN role in this doctorate, anecdotal evidence from CRNs and recommendations from doctoral theses also confirmed that this is a topic that may be important to CRNs in terms of their professional identity (Stobbart 2012, Jones 2017). The initial emphasis for my doctoral work focussed on the educational support for CRNs, however throughout the course of the programme, this progressed to a wider exploration of the scope of the CRN role (see executive summaries from previous assessments in Appendix 1). Thirdly, on a more personal level, I have developed a keen interest in the support of CRNs and their working relationships. This started in 1995 when I was first employed as a research nurse. At that time, there was little or no recognition of this group. Since then, I have completed a MSc examining the support needs of CRNs, helped to establish one of the first five clinical research facilities (CRFs) in the UK, co-wrote the first version of the research nurse competency package (later adapted by the Royal College of Nursing), founded the Scottish Research Nurse and Co-ordinators Network and established undergraduate and post graduate courses for CRNs. Subsequently, I am

invested in maximising the potential contribution of clinical research nurses and assisting in providing information that would facilitate effective working practices.

Initially a PhD was considered to explore these issues, however the professional doctorate was chosen as it facilitated practice-based approach, which was deemed to be more relevant to the topic of study.

My personal knowledge and understanding of nurses' roles in clinical research combined with the literature will assist me to use the findings of this study to gain a greater understanding of CRNs working relationships. It is hoped that these findings will inform the practice of CRNs in the UK and overseas.

1.3 Defining terms: Clinical Research Nurse

A clinical research nurse refers to any nurse who is employed principally to undertake/facilitate research within the clinical environment. The CRN generally co-ordinates and facilitates the effective/safe delivery of medically-led research, but may also be a co-investigator in these studies (Gibbs and Lowton 2012, Brinkman-Denney 2013, Fawcett and McCulloch 2014, MacArthur, Hill and Callister 2104).

Nurses who undertake CRN roles may have a variety of job titles, though the most common are clinical research nurse, clinical trial(s) nurse or clinical research coordinator (Gordon 2008, Gibbs and Lowton 2012, Fawcett and McCulloch 2014, Tinkler et al 2017). There are also a growing number of clinical research midwives however, for the purposes of this study, clinical research nurse (CRN) will be used to encompass all job titles in this field.

Clinical research nursing is an area of nursing practice that is closely aligned to maintaining the balance between clinical care and adherence to research protocols

(American Nurses Association and International Association for Clinical Research Nursing 2016). Subsequently, the CRN is recognised by many in the research arena as a crucial member of the multidisciplinary research team, whose primary responsibilities are to care for research participants, gather research data, promote protocol implementation/management and ensure participant protection (MacArthur, Hill and Callister 2014, Jones, Hastings and Wilson 2015, Micklos 2016).

Defining the full scope of the CRN is problematic, largely due to the variety of responsibilities that CRNs have on individual studies. However, many authors have attempted to explore and describe the range of duties that the CRNs undertake (Ledger, Pulfrey and Luke, 2008, Pidd 2011, Gibbs and Lowton 2012, Hastings, Fisher and McCabe 2012, Brinkman-Denney 2013, Hardicre 2013, Jones, Hastings and Wilson 2015). Progressing from this position, there is also a trend that is moving beyond simple description of these to formulate clustered domains of activities (Wilkes et al 2012). Most significant of these is the Domains of Practice described by Bevans et al (2011) and the subsequent Scope and Standards of CRN practice (American Nurses Association and International Association for Clinical Research Nursing 2016) (see Table 1). The American Nurses' Association have recognised these advances and have confirmed that clinical research nursing should be considered as a specialised area of nursing practice in America (American Nurses Association and International Association for Clinical Research Nursing 2016). Similar proposals are also being discussed in other countries, including the UK, Ireland and Taiwan.

Table 1 Standards of Practice for Clinical Research Nursing (American Nurses Association and International Association for Clinical Research Nursing 2016)

| Standard | Title | Detail |
|-------------|--|--|
| Standard 1 | Assessment | Collection of data pertinent to research and participant's health |
| Standard 2 | Diagnosis | Analysis of data to determine actual or potential diagnosis, problems or issues |
| Standard 3 | Outcomes Identification | Identification of expected outcomes required to plan individualised to the participant |
| Standard 4 | Planning | Development of a plan that prescribes strategies and alternatives to attain measureable outcomes |
| Standard 5A | Implementation: Coordination of care | Coordination of care delivery for the research participant |
| Standard 5B | Implementation: Health teaching and health promotion | Employment of strategies to promote health and a safe environment |
| Standard 6 | Evaluation | Evaluation of progress towards the attainment of goals and outcomes |

Currently, in the UK, CRNs are not recognised as being specialist practitioners. Any developments in this field would, most likely, be approved by the Nursing and Midwifery Council (NMC) who state that specialist practice involves exercising higher levels of judgement, discretion and decision making in clinical care. These should concentrate on four domains: clinical practice, clinical practice leadership, care and programme management and clinical practice management (Nursing and Midwifery Council 2017). Whilst senior/advanced practice CRNs might meet the requirements to practice in these domains, there does not currently appear to be a strong appetite to move forward with this across the UK. The National Institute for Healthcare Research

is pushing this agenda. However, their remit is predominantly focussed on England, so any developments may not extend to the rest of the UK.

1.4 Summary

This introductory chapter has identified the importance of clinical research and the role that clinical research nurses play in delivering successful research. It has also explored the development of the CRN role. Furthermore, it has highlighted the importance of the relationships that CRNs have with their clinical nursing colleagues. The following chapter will explore the current evidence in relation to CRNs experiences of working in a clinical environment.

Chapter Two – Review of previous research and theoretical frameworks

2.0 Introduction

Bryman (2008) suggested that a review of existing evidence can identify what is known on the topic of interest, concepts or theories that are relevant, methodologies that have been employed, any controversies, inconsistencies and any unanswered questions. This study used interpretative phenomenological analysis (IPA) and reviews of previous research are not always undertaken when using this methodology. However, due to my pre-existing knowledge of the published literature in this field, as well as acknowledgement of my personal understanding of this area, it was decided that a literature review was appropriate. It was felt that by acknowledging the literature, that this could then be bracketed; thereby attempting to ensure that this did not influence the data collection, or analysis. Additionally, in a search of doctoral theses using IPA, the majority included a review of the literature, suggesting that others also felt that this was necessary. These included Nunn (2009), Briggs (2010), Lannan (2015), Vicary (2016) and Stanier (2017). However, acute attention was given to reduce the likelihood of this influencing the data. This included a reflexive awareness within the interviews, a reflective review post interview and discussion of the findings with critical friends. A cycle of on-going reflection aided in attempts to ensure that pre-existing knowledge did not influence the study. An example of this can be seen in Appendix 2. In this way, the focus moved from myself, as the researcher, to the participants and their experiences. This approach is recommended by Smith, Flowers and Larkin (2009). Furthermore, Smith, Flowers and Larkin (2009) also emphasise that positive engagement with the participant facilitates the practical application of bracketing.

The decision to undertake a literature review prior to the study could introduce the criticism of bias but the steps undertaken to minimise this will be further discussed in the methods section.

Subsequently, a review of previous research was completed to explore the following:

- What are the factors that could influence the experiences of CRNs in interacting with their clinical nursing colleagues?
- Are there any concepts or frameworks identified in this literature that might usefully contribute to the examination of the topic?

A full literature search was undertaken, including literature from the last 15 years. Publications in this area in the 1990s and early 2000s generally outlined a descriptive scope of the role to identify potential nursing careers in research. These reflected preliminary steps being undertaken in the development of the CRN role so were excluded. Previous searches of earlier literature indicated that the role and responsibilities of CRNs prior to 2003 did not reflect current practice. Most of this literature was also descriptive and lacking a sound evidence base. Since that period there has been a gradual growth in the number of publications exploring more detailed and enhanced aspects of role, workforce issues and opportunities and challenges with which CRNs are faced. These represent a more contemporary and relevant landscape. Parahoo (2006) and Green and Thorogood (2007) recommend a review of contemporary literature, whilst cautioning the reviewer to ensure that seminal and grey literature are also considered. This assists in ensuring that the full scope of literature is considered. Subsequently, this review encompassed the breadth of published and also grey literature on this topic.

Truncation and Boolean operators were used to maximise the reach of the search (Bryman 2008). The databases that were used were AMED, CINAHL and MEDLINE. These were chosen as they would most accurately identify previous work in this field. However, some unpublished work may not be identified; therefore, electronic searching was also supplemented with hand searching of peer reviewed journals and grey literature. The inclusion and exclusion criteria used for the search can be seen in Table 2.

Table 2 – Inclusion and exclusion criteria

| Inclusion criteria | Exclusion criteria |
|---|---|
| <ul style="list-style-type: none"> Articles related to the experiences of clinical research nurses Empirical studies Descriptive studies Grey literature (including theses and unpublished reports) | <ul style="list-style-type: none"> Articles not published in English Articles more than 15 years old (unless seminal) |

One of the difficulties in obtaining a full range of literature on this topic is the variety of job titles that nurses may have. However, there is a consensus that these nurses generally have one of the three following job titles: Clinical Research Nurse, Clinical Trial(s) Nurse or Research Co-ordinator (Gordon 2008, Gibbs and Lowton 2012, Fawcett and McCulloch 2014, Tinkler et al 2017).

Initial searches investigated research and nurse returned 128,593 results in CINAHL alone. Subsequently, quotation marks were also used to focus on articles that

contained this exact phrase, rather than publications that contained the words more generally.

Subsequently, the search terms that were used were “Research Nurs*” OR “Research Coordinator” OR “Research Co-ordinator” OR “Trial* Nurs*”

AND

Experiences OR perceptions OR attitudes OR views OR Feelings

2.1 Results of search

The number of articles found and the search process followed can be seen in Figure 1. This search returned 27,231 articles, reports or theses (or abstracts). These were reviewed and 27,195 were eliminated. One of the main reasons for elimination was that many identified ‘research’ and ‘nurse’, but these words were separated by a colon or a comma. These usually related to nursing research, as opposed to research nursing. Other main reasons for exclusion included a lack of relevance or superficial coverage of the topic of study. Superfluous articles were filtered out by manually examining these results via EBSCOhost.

Following a hand search of theses, reports and available conference papers, two PhD theses were identified (Stobbart 2012 and Jones 2017). Stobbart’s research was an ethnographic study relating to the practicalities of conducting randomised controlled trials in an acute stroke unit. As part of this Dr Stobbart examined the contribution of CRNs and some of the relationships that they established (Stobbart 2012). Jones’ research aimed to explore how the CRN workforce is organised, their experiences and the most effective method to structure this workforce (Jones 2017) Jones’ thesis was made available after I had started interviewing the participants in this study.

Additionally, four reports were included. These were from the National Council for the Professional Development of Nursing and Midwifery (NCPDNM) (2008), a report from a CRN 'think tank' (Pidd 2011), results presented in a symposium (Aldridge 2018) and a report detailing the research nursing and midwifery structures and roles (Whitehouse and Smith 2018). This resulted in examination of 36 full text paper for eligibility.

The final result of the search identified 24 articles, theses and reports. The majority of these were empirical studies, or reviews of literature. To assess the quality of the evidence, critical appraisal tools were used (Critical Appraisal Skills Programme 2018) (Appendix 3). These were used as they provide a standardised tool that allows the consistent examination of studies (Gerrish and Lacey 2010).

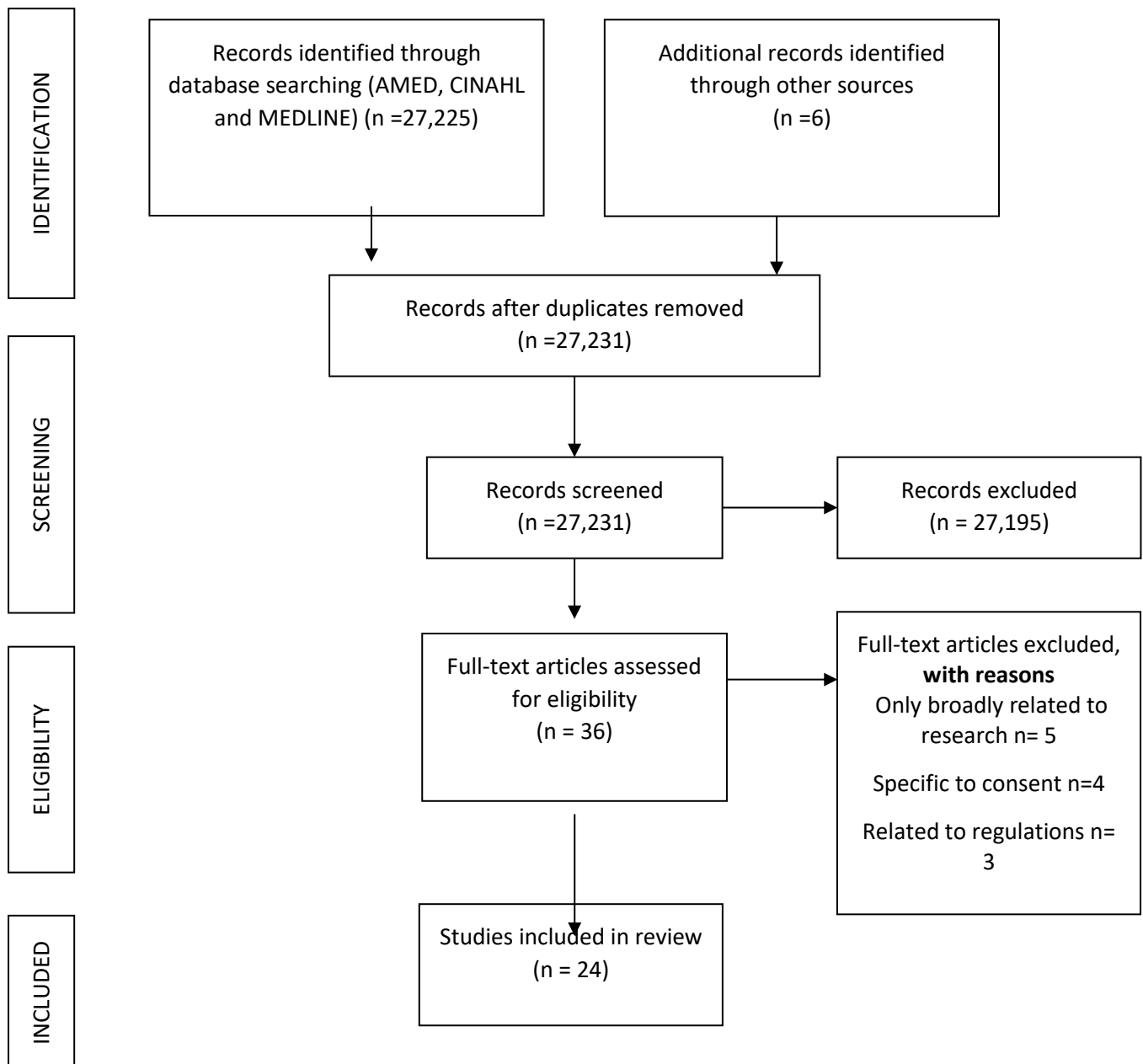


Figure1: PRISMA Flow Diagram

Adapted from: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097

In addition to the literature outlined above, background literature relating to roles and responsibilities was also gathered. Some were anecdotal, with limited literature to qualify positions, however they have been cautiously included as they reflect the experiences of nurses working in this field. This was necessary to provide a context for the experiences that are explored in this study.

2.2 Findings of the review

The results of the review of the 24 studies are outlined below.

2.2.1 What are the factors that could influence the experiences of CRNs in interacting with their clinical nursing colleagues?

Some authors indicate that there may be barriers between clinical care and research. These barriers largely relate to physical and social factors (Bell 2009, Poston and Buescher 2010, Houlston 2012, Stobbart 2012, Jones 2017, Tinkler et al 2017). Stobbart's (2012) study indicated that physical factors, such as the separation of clinicians and research staff and the transient nature of the CRNs presence in the wards, can lead to a lack of legitimacy. This also issues with the visibility of the clinical research nurses and the lack of embeddedness in the clinical area (National Council for the Professional Development of Nursing and Midwifery 2008, Houlston 2012, Jones 2017). Social factors may include; a lack of understanding of research and the CRNs role; the CRNs perceived association with doctors; professional identification (for example because of lack of uniform) and some concerns relating to clinical nurses acting as gatekeepers to patients (National Council for the Professional Development of Nursing and Midwifery 2008, Stobbart 2012, Kunhunny and Salmon 2017, Larkin et al 2017, Tinkler et al 2017, Jones 2017, Whitehouse and Smith 2018). The outcomes from these studies suggest that CRNs can express feelings of isolation from their

nursing colleagues and a lack of recognition of their contribution to healthcare delivery/improvement (Roberts et al 2006, Rickard et al 2007, Spilsbury 2007, Gordon 2008, Bell 2009, Coulson and Grange 2012, Eastwood et al 2012, Hemingway and Storey 2013, MacArthur, Hill and Callister 2014, Tinkler et al 2107). The causes for this appear to be varied, including pressure from the principal investigator/study sponsor and a lack of recognition of responsibilities. However, difficulties in developing, and maintaining, positive relationships with clinical colleagues (Roberts et al 2011, Catania 2012, Stobbart 2012, Jones 2017) and perceived inadequate peer support (Spilsbury et al 2007, Coulson and Grange 2012, Eastwood et al 2012) appear to be significant contributors.

Reports of isolation and a lack of understanding of the CRN role are not unique to the UK, with publications from Australia (Eastwood et al 2012), Canada (Smith et al 2015), Italy (Catania et al 2011), Japan (Matsumoto et al 2012), New Zealand (Roberts et al 2011) and the USA (Tillett 2015) confirming that this is an international phenomenon. However, many of the UK and international publications report anecdotal findings.

When relationships are more positive, the working environment is much more productive and conducive to high quality research being undertaken (Johnson and Stevenson 2010, Houlston 2012, Hemingway and Storey 2013). There is also evidence that describes an environment in which CRNs feel that they contribute to enhancing patient care, develop speciality and research expertise, greatly value their autonomy, are positive about extra time that they can spend with their patients, feel positively challenged and appreciate the variability of the role (Chester et al 2007, Rickard et al 2007, Spilsbury et al 2007, Johnson and Stevenson 2010, Roberts et al 2011, Eastwood et al 2012, Kunhunny and Salmon 2017). A study conducted by Smith et al (2015) based on a survey of 482 intensive care clinical nurses in Canada found

that successful research is dependent on co-operation between researchers and clinicians. Other notable findings indicated that 78% of respondents believed that research improved patient care. However, 54% felt that research had conflicted with patient care and 41% expressed that research increased their workload. Though these results are important, the intensive care environment is atypical from most care settings and it would be advantageous to repeat this study in the clinical areas that most CRNs work.

A growing number of CRNs work in centralised clinical research facilities (CRFs), some in research teams (for example oncology), whilst others work more independently with a principal investigator (Gordon 2008, Hardicre 2013). There are some indications that working within a team may help to mediate feelings of isolation (Gordon 2008), but contributing factors to this are not clear. There is also other evidence indicating that an understanding of the clinical speciality may be important in terms of clinical credibility (Chester et al 2007 Gordon 2008, Bell 2009, Hemingway and Storey 2013). However, much of the published evidence reflects opinion and is not evidence-based.

Regardless of where CRNs are based, the patient group that they need to access are largely in a clinical environment and CRNs are required to interact with clinical nurses to work effectively (Bell 2009, Lubejko et al 2011, Smith et al 2015). However, clinical nurses are under increasing pressure to provide high quality care against a backdrop of diminishing resources, increasing acuity of patients and increasing demands on their time (Purvis and Cropley 2003, Stobbart 2012, Needleman 2013, Khamisa et al 2016, Jones 2017). Consequently, it has been reported that nurses can express a moral disengagement, explaining behaviours that they would not themselves promote. This can manifest itself in a resistance to research and evidence-based practice

(Melnik and Fineout-Overholt 2012, Stobbart 2012, Fida et al 2016). Subsequently, there are some reports that trust between staff has diminished (McCabe and Sambrook 2014). Additionally, clinical nurses have expressed concern regarding how research can negatively impact on patient care (Smith et al 2016, Tillett 2015, Jones 2017). There is also a difficulty in promoting research in a practice setting, largely due to the time commitments involved (Solomons and Spross 2011, Houlston 2012).

Some studies identified that CRNs have had difficulty in engaging with clinicians, especially when additional clinical measurements are requested to comply with a research protocol (Dunleavy et al 2011, Houlston 2012, Kunhunny and Salmon 2017). This is potentially problematic for the CRN, who must rely on this support for research results to be accurate and timely (Stobbart 2012, Tinkler et al 2107). Moreover, CRNs also depend on clinical colleagues to assist with the crucial component of safety reporting of adverse events (Smith et al 2015). Subsequently, a significant contributory factor to successful research appears to be dependent on effective cooperation between CRNs and clinical nurses. Kunhunny and Salmon (2017) have contributed to this debate. They utilised an exploratory qualitative methodology and interviewed eleven purposively sampled CRNs. This research highlighted that clinical research is often perceived as being of low priority so that CRNs have to take responsibility to promote research, developing strategies to overcome barriers and acting as agents of change. Agents of change are responsible for organising and enabling change (Burnes 2009) and should champion evidence based practice in clinical areas. Kunhunny and Salmon (2017) also identified that student nurses should be exposed to the CRN role to increase awareness of the contribution that CRNs make. However, it is unclear if the potential benefits of having CRNs associated with a clinical area are being maximised (Wrigley and Humphreys 2010). Examples of this could be as

agents, or ambassadors, of evidence based practice (EBP) or as support for clinical nurses undertaking research. CRNs as ambassadors for EBP is not a new concept, having been described fourteen years ago (Routledge et al 2003), and the notion has more recently been promoted by Coulson and Grange (2012) and Houlston (2012) as a useful role for CRNs. However, to date, this is not commonplace and the potential reasons why this is the case appear worthy of further exploration. Furthermore, the precise benefits of CRNs undertaking this role have not been empirically established.

More recent publications have indicated that there is an opinion that CRNs are not perceived to be 'real' nurses (Stobbart 2012, Jones 2017, Tinkler et al 2017). This may be significant as the potential consequences of poor relationships could impact on patient care, staff morale, research outcomes and ultimately potential improvements in patient care (Smith et al 2015, Tillett 2015). Other findings from the identified PhD theses include the need for feedback on studies that have been completed as this can help to re-enforce the importance/relevance of the studies that have been undertaken. They also identify that uniforms have a part to play in the visibility of CRNs (Stobbart 2012, Jones 2017). Both these studies also explored experiences that CRNs have described. However, Stobbart's study was conducted in a stroke unit and primarily followed an ethnographic methodology. Jones' study had a broader remit, exploring leadership and infrastructure for CRNs, though she also explored the experiences of CRNs in a series of focus groups. Neither had a primary focus to explore the experiences of CRNs to gain a deeper understanding of CRNs relationship with clinical nurses. The study conducted by Tinkler et al (2017) utilised four focus group comprised of nineteen CRNs and developed four themes. These related to the transition of clinical nurse to CRN, conflicted feelings in terms of consent, the importance of belonging and how they were perceived in the wider organisation.

Whilst there is some literature relating to positive aspects of the role, most of the literature has described the challenges that CRNs face. This may be due to the relatively recent emergence of clinical research nursing, and the drive to establish a sound structural and theoretical basis for this type of practice. The more recent development of doctoral level studies, examining the role and working practices of CRNs, indicate a more considered approach to the development of CRNs and facilitate a departure from anecdotal description of individual experiences to a more evidenced based empirical approach.

Subsequently, there is a need for a greater understanding of this topic in order to assist in maximising the positivity of this role and minimising the impact of negative feelings.

2.3.2 Are there any concepts or frameworks identified in the literature that might usefully contribute to the examination of this topic?

Internationally, the scope of CRN role is becoming more focussed, grouping together taxonomies into domains of practice. Wilkes et al (2012) used a quantitative methodology to examine the frequency of clinical trials nurse (CTN) activities and suggested that there are more common responsibilities (such as recruitment, informed consent and data management) that might be separated from less frequent activities (for example, protocol assessment). However, the sample (n=67) was too small to obtain statistically significant results. In relation to this study, whilst some of the questions did relate to professional role perception (including non-research nurses' acceptance/support of their role), these were only reported as examples of free-text comments indicating that CTNs are not recognised or valued by nursing management. Subsequently, this domain model may not be wholly useful in examining the experiences of CRNs.

In the United States of America, a survey of 109 CRNs identified distinct roles in which they participate (Mori, Mullen and Hill 2007). These were then developed by Castro et al (2011) who convened an expert panel to conduct a Delphi study exploring the scope of the CRN role. This group identified five dimensions of clinical research nursing (clinical practice, human subject protection, study management, contribution to clinical science as an active research team member and care coordination within research participation). These were decided upon as they could provide a framework for CRN practice regardless of the type of studies, responsibilities or the practice setting of the CRN. Since that time, the International Association of Clinical Research Nurses have developed these into a full scope of standards and practice document that has been used to facilitate the American Nurses Association to determine that Clinical Research Nursing is an area of specialist practice. This is of significance because it is the first time that a national nursing organisation has assigned this status to clinical research nursing. It is hoped that this development will assist in gaining recognition for the work of the CRN, help to attract nurses into the role and to facilitate a process whereby CRNs can gain a formal certification set against the 5 Standards of Practice for Clinical Research Nursing. These can be seen in Table 1 (see page 6).

Once again, whilst there are elements of this framework that may be applicable (for example in standards relating to planning (4) and coordination of care (5)), it does appear to lack specificity in terms of the question that this research study seeks to address. However, both frameworks may be useful in terms of contextualising the findings of this current work.

There is some evidence that CRNs can feel on the periphery of the relationships in the clinical environment (Stobbs 2012). There is an indication from Stobbs's work that this has led to feelings of liminality, similar to those described by Turner (1967). Many

of the features of a liminal state appear to reflect the feelings that CRNs have expressed, but this phenomenon does not appear to have ever been systematically explored.

Liminality was described by Van Gennep (1909 and translated in 1960) to explore the ambiguity of an in-between state. Turner (1967) developed this concept describing the liminar (person in liminal state) as 'inter-structural' because they are 'betwixt and between'. Liminality in professional environments can be detrimental to optimal working by enhancing a feeling of isolation, increasing stress, contributing to a lack of power and reducing ability to obtain organisational support that could be beneficial (Zabusky and Barley 1997, Garsten 1999, Tempest and Starkey 2004, Borg and Soderlund 2015). Liminality can also refer to transient periods when an individual is transitioning between roles or situations where one could be on the boundary, or threshold, of an organisation making it difficult for that individual to exert any influence (Borg and Soderlund 2015).

Liminality has been explored in professional roles including social work, higher education and some aspects of nursing (Hurlock et al 2008, Cook-Sather and Alter 2011, Evans and Kevern 2015). However, in the CRN/Clinical Nurse context, it has become apparent from Stobbart's (2012) PhD, that the consequences of liminality could potentially disrupt the CRN's feelings of value in a clinical setting. Subsequently, interactions could be compromised and relationship building could be problematic. Liminality potentially demonstrates a useful framework for the relationships that CRNs develop. Subsequently, it will be referred to later in this thesis.

Kunhunny and Salmon (2017) and Tinkler et al 2017 refer to a process whereby CRNs become learners and gradually gain expertise. This reflects Patricia Benner's 'Novice

to expert' model (Benner 1984). However, Benner's model has received considerable criticism, with some authors even pronouncing it anti-theoretical or atheoretical (Gardner 2013). Conversely, others acknowledge the Benner's model as being an excellent tool to evaluate skill acquisition and evaluating progress (Dale et al 2103).

Despite criticisms, the Novice to Expert model has been described in the CRN literature (Bird and Kirshbaum 2005, Scott et al 2012), is used by the CRN group in the Oncology Nursing Society and has been utilised extensively in respect to attaining competency in clinical research. The focus of this model does not specifically relate to the establishment of relationships; however, given the wide use of this model in clinical research nursing it was deemed to be prudent to consider that there may be elements of Benner's model that could be resonant in terms of this study.

Another structure that could be useful is Beauchamp and Childress' (2009) 'principles of biomedical ethics'. These include:

1. The principle of respect for autonomy (to facilitate independence)
2. The principle of non-maleficence (to do no harm)
3. The principle of beneficence (to do good)
4. The principle of justice (to ensure equity and fairness)

These principles simultaneously assist in ensuring the rights of study participants to be protected from foreseeable harm and also legitimising their participation in research (Beauchamp and Childress 2009). This could be applicable in terms of conflicts with clinical care or justifying the role of the CRN. Ethical issues relating to the work of the clinical research nurse have been explored in the literature over a number of years. To date, these have to related to ability of patients to give consent (Campbell 1998, Catania 2012, Hemingway and Storey 2013). Again, whilst these principles would not

provide an over-arching framework for this project, they do demonstrate some of the ethical guidelines that relate to clinical research.

2.3 Summary

The literature has indicated that there may be barriers to the successful delivery of research. There is some literature that indicates that the interrelationship between the CRNs and clinical nurses is important. However, this has not been explored in great depth, therefore this research project sets out to gain a deeper understanding of how the full scope of relationships with clinical nurses' might impact on the CRNs' experiences. This may be viewed as only being one side of the narrative. However, it will assist in illuminating some of the nuances of this relationship, and how things might be improved in the future. Further research (possibly post-doctoral work), could explore clinical nurses' experiences of this relationship, to provide further balance to this knowledge base. It also suggests that there may be some theoretical concepts and frameworks that may be useful in understanding the context in which CRNs practice.

However, there is a gap in the literature pertaining to the exact nature of the interactions between CRNs and their clinical nursing colleagues. This study will explore the CRNs' experience of this relationship and attempt to gain a deeper understanding of how this might be optimised in the future.

Chapter three - Methodology

3.0 Research Question

The research question for this study is:

How do CRNs make sense of their relationship with clinical nurses?

Sub-questions are:

- a. What are the experiences of CRNs in their relationships with clinical nurses?
- b. What contributes to the establishment and maintenance of these?

3.1 Research design

To explore the research question, a qualitative interpretative phenomenological analysis approach was used. An inductive qualitative approach was appropriate for this study as it allowed the researcher to gain a deeper/richer understanding of the experiences of individuals (Brown 2009, Robson and McCartan 2016). By utilising this approach, themes were elicited from the data allowing for a more comprehensive understanding of the nature of the topic (Saks and Allsop 2007, Silverman 2016).

Phenomenology was first developed as a distinct qualitative approach by Edmund Husserl (1859-1938), though he founded this methodology on earlier work which aimed to explore people's experiences as being of philosophical significance (Todres and Holloway 2010). It is an approach that is concerned with discovering and understanding an individual's opinions and perspectives from their point of view. The ultimate aim of phenomenological research is to gain an understanding of what it is like to be that person, at that point in time (Polit and Beck 2008, Hanson, Balmer and Giardino 2011, Newell and Burnard 2011, Gutland 2018). An initial foundation for

phenomenological research is accumulating examples of day-to-day experiences, exploring and then reflecting on them. Husserl described these as one's 'lifeworld', however others used the more commonly used term 'lived experience' (Todres and Holloway 2010, Yates and Leggett 2016). The rationale for scrutinising these experiences is to explore perspectives that are shared, thereby identifying commonalities between human interactions and experiences (Todres and Holloway 2010). However, this approach can be problematic when the validity of experiences are only superficially accepted (Bowling 2014), or when the research only bears witness to the experience and denies the active role of the participant and researcher (Pringle et al 2011).

Following on from Husserl, Martin Heidegger (1889-1976) included a hermeneutic element that marked (in Heidegger's eyes) a movement from Husserl's theoretical description of phenomenology. Backstrom and Sundin (2007) described the difference as being that phenomenology uncovers meanings, hermeneutics interprets the meaning. Heidegger (1962) suggested that this elicited greater understanding of meanings as the interpretation will offer a unique reflection of anticipation, actualisation and reflection on an occurrence. Hans-Georg Gadamer (1900-2002) also followed this philosophy, postulating that knowledge development is possible only when understandings are questioned and assumptions are modified based on this (Finlay 1999). In this way Finlay, a prolific author on Interpretative Phenomenological Analysis, suggested that deeper understandings can be achieved (Finlay 1999, Finlay 2011). This examination can lead to a hermeneutic circle whereby the interpretation is based on cyclical examination of the part, as a component of the whole and the whole, as it relates to the parts (Smith, Flowers and Larkin 2009). The approach suggested by Heidegger could have been used for this study, but it would not have allowed the

researcher to interpret the experiences and interpretations of the participant. For the purposes of this study this was important as this permitted contextualisation of the interpretations and placement of these within the wider environment in which research is conducted. Therefore, the research project utilised Interpretative Phenomenological Analysis (IPA).

IPA is a form of phenomenological analysis that explores the intensive examination of an individual's in depth accounts of their personal experiences (Smith 2011). It is both idiographic and cognitive, concerning itself with the particular and how one makes sense of one's experiences (Smith, Flowers and Larkin 2009). It also recognises the pivotal role of the researcher, as they make sense of the personal experiences of the research participants (Pringle et al 2011). A pre-eminent authority in IPA is Jonathan Smith. Smith detailed the key criteria of an acceptable interpretative phenomenological study; guiding the researcher to conduct high quality, rigorous research (Smith 2011). This approach was followed (see appendix 4).

When undertaking research, the methodology should be congruent with the research questions (Smith, Mitten and Peacock 2009). This maximises the likelihood that the overall objectives of the research will be met (Silverman 2016). IPA facilitated an exploration of the experiences of the CRNs and identified real-life understandings of their interactions; whilst also facilitating the researcher's objective: to make sense of the experiences of the participants. In this study, the experiences were interpreted by the nurses (interpreting their own experiences) and the researcher (interpreting the individual experiences and relating this to potential common themes and the wider literature), thereby allowing for contextualisation of the results (Brocki and Wearden 2006, Smith, Flowers and Larkin 2009). IPA was considered to be an appropriate methodology as it is deemed to be particularly useful when the process is complex or

where the issues in question are personal. Subsequently, this approach facilitates individualised analysis that can elicit richer findings (Kay and Kingston 2002).

Every research methodology has potential limitations (Salthouse 2011). In this study, these could include introduction of bias from the researcher (Brocki and Wearden 2006, Pringle et al 2011, Davies, Curtin and Robson 2017) or the possibility that participants may be guarded about their experiences, and may not wish to divulge too much risking exposing their inner lives (Newell and Burnard 2008). Conversely, some participants may prepare for the interactions, in order to present their experiences in a manner that would be desirable to the researcher (Brocki and Wearden 2006). Other limitations could include a lack of transferability (Pringle et al 2011) and a risk that the limitations of data collection methods are not considered (Brocki and Wearden 2006, Smith 2011).

Although interpretation of experiences might introduce bias, this is also deemed to be a particular strength of IPA; providing a path to illuminate the participant's experiences (Smith, Flowers and Larkin 2009). However, bias is a potential difficulty with all research (Bryman 2008). The researcher utilised a number of techniques to minimise this; the use of reflection (see example in appendix 2), combined with a reflexive approach and a clear audit trail, with detailed description of processes followed, was used (Pringle et al 2011, Smith 2011). The audit trail was achieved by tabulation of quotes from the participants and articulation of how these related to emergent patterns and themes (see appendix 5 for an example of this).

Member-checking was not used, as there was a dialogue with the critical friends to discuss the emergent patterns and how these related to the discussions. However, this may have verified that the intended meaning of the discussion was interpreted

correctly, and its absence may have been a potential limitation. Nevertheless, Mjosund et al (2016) stated that a literature search on IPA studies had confirmed that member checking was not a requirement of this type of study.

To gain qualitative information from CRNs other methodologies could have been adopted, including ethnography, discourse analysis or grounded theory. These may have yielded informative findings (Parahoo 2006, Miles, Huberman and Saldana 2014, Yates and Leggett 2016). Indeed, where there is almost no information on a topic, Annells (2006) suggests that a combination of interpretative phenomenology and grounded theory could be used, as it allows for exploration of experiences, whilst also facilitating the generation of a theoretical underpinning. Whilst this may have been informative, the complexities of combining two distinct methodologies would have been difficult for a novice qualitative researcher to manage (Jolley 2007). A flow diagram detailing the decision making process that led to the choice of IPA can be seen in Appendix 6.

3.2 Participants

Most proponents of IPA promote recruiting a homogenous sample to ensure that the research question is meaningful (Brocki and Wearden 2006, Smith, Flowers and Larkin 2009, Pringle et al 2011). This was achieved by ensuring that all participants were active CRNs (that is, CRNs that are actively involved in recruitment and delivery of clinical research projects/clinical trials). As some CRNs work independently with a principal investigator and others work in a larger team, with a number of investigators, some degree of heterogeneity was included. Indeed, Pringle et al (2011) suggested that the effectiveness of IPA might be compromised if the sample is too specific or unique. This broadened the scope of the research, whilst reflecting some of the

breadth of the settings and experiences that CRNs inhabit. Though IPA does not seek to be comparative or representative, commonalities can be useful to a wider audience (Smith, Flowers and Larkin 2009).

3.3 Inclusion criteria

The inclusion criteria applied were:

- Primary employment as CRN (NHS band 5/equivalent or above)
- Engagement with clinical staff to undertake duties
- Currently working either in a research team or directly with a principal investigator

3.4 Safety and security of identifiable information

Documentation detailing the participant's names and corresponding coding was kept in a locked cabinet to maintain external anonymity. All participants were given a non-gender related pseudonym. Any link between the participants and the data was broken and quotes that could have identified the workplace of each participant were redacted.

At the end of the study, any, non-identifiable, data will be kept for 5 years, in accordance with Queen Margaret University guidelines (Queen Margaret University 2010).

3.5 Ethics, risks and ethical permission

It was considered that there was potential for the interviews to result in the participants exposing their feelings in a way that may be upsetting. Should this have occurred, the interview would have been paused, focussed in a different direction or terminated

altogether. At the start of all the interviews, the participants were reminded that their participation was voluntary, their data would be anonymised and that they could withdraw at any time. An independent advisor was also appointed, should they have wished to discuss anything related to the study.

The participants may have disclosed unethical practice or malpractice in the course of the discussions. Depending on the seriousness of this disclosure, it may have necessitated action potentially exposing myself, as a Nursing and Midwifery Council registered nurse, to a problematic situation. In practice this did not occur, but the possibility of seeking permission from the participant to discuss this with the clinical research nurse manager was put in place to account for this eventuality.

There was also the possibility that the discussions could have been distressing for myself. If this had occurred, I had planned to discuss this with my supervisors or my critical friends. This did not occur during the study.

An ethical review was undertaken by Queen Margaret University (QMU) Ethics Committee and the study was approved. As the study only involves NHS staff recruited by virtue of their professional role, full NHS ethical approval was not required (Health Research Authority 2016).

Contact was made with the local Research and Development office to ensure that appropriate approvals were in place before the study commenced. They confirmed that it was only University ethical approval from that was required.

3.6 Process for identification of participants

The researcher made contact with the clinical research nurse manager (CRNM) in a Scottish Health Board to access the individuals who may be approached. In this way

the CRNM acted as a gatekeeper to the potential participants. The CRNM had oversight of the vast majority of the clinical research nurses in the Board and had an extensive email mailing list that was utilised to disseminate information about the study.

3.7 Consent

Written informed consent was obtained from participants prior to involvement in the study. An information sheet (see appendix 7) was provided to participants by the gatekeeper and was discussed again prior to the participants signing the consent form. The information sheet included details on the study, procedures to be followed, any potential risks, rights to withdraw from the study and details of an independent advisor.

3.8 Sampling

For this study, a purposive and convenience sampling technique was used. This ensured that the participants had the experience that was required to answer the research question (Bryman 2008). Using purposive sampling approach, the researcher actively sought a sample of participants who are most likely to answer the research questions (Smith, Flowers and Larkin 2009, Robson and McCartan 2016). This allowed for the identification of individuals who demonstrated the desired attributes from the population (Clealy, Horsfall and Hayter 2014). Purposive sampling also allowed selection of nurses who work independently and others who work in a team. This approach is commonly used in IPA (Brocki and Wearden 2006, Smith, Flowers and Larkin 2009) but it is acknowledged that this could have potentially introduced bias to the research, especially when combined with convenience sampling as external influences can lead to a skewed sample (Robson and McCartan 2016). Using a gatekeeper can also maximise the likelihood that the group is homogenous

enough to produce highly pertinent information (Cleary, Horsfall and Hayter 2014). However, Green and Thorogood (2007) stated that using gatekeepers can, themselves, introduce different bias, as more positive staff are often selected. Nevertheless, their role can be crucial in accessing difficult to reach participants (McFadyen and Rankin 2016). The process used is described in Figure 2

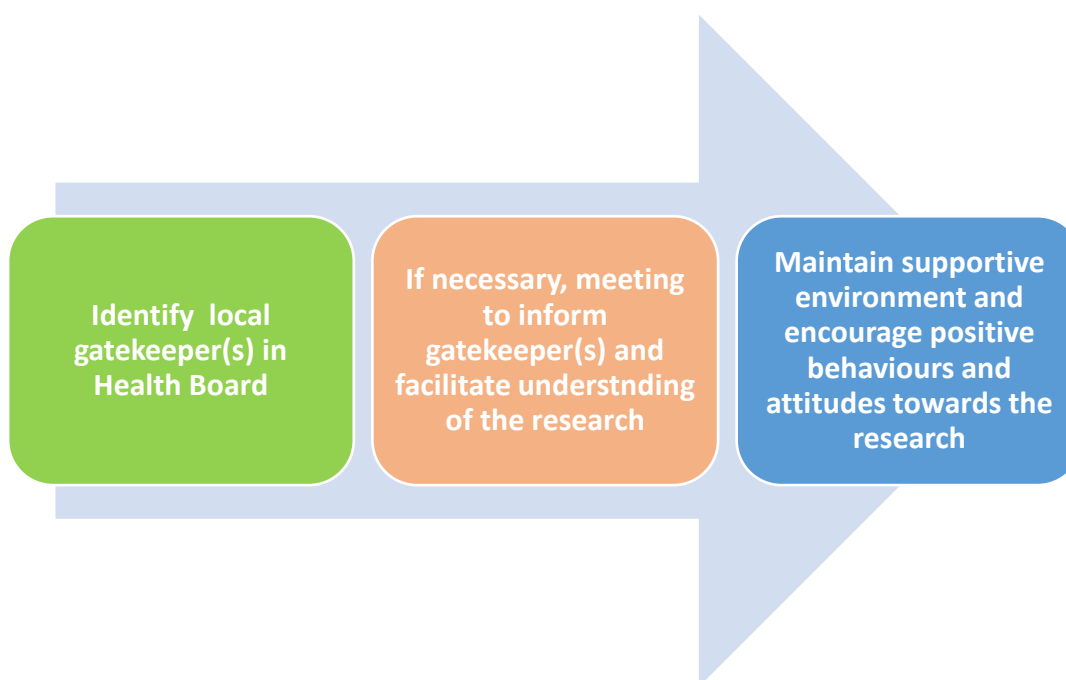


Figure 2 Process for engagement and communication with gatekeepers (Green and Thorogood 2007, McFadyen and Rankin 2016)

A perennial issue in qualitative research is what constitutes an appropriate sample size (Gerrish and Lacey 2010). Unlike quantitative research, a relatively small sample is deemed acceptable (Saks and Allsop 2004, Bryman 2008, Polit and Beck 2008). In Smith's (2009) paper he described a range of characteristics of seven high quality IPA studies. The number of participants in these studies ranges from six to twelve. Smith, Flowers and Larkin (2009) cautioned that larger numbers do not necessarily translate to higher quality findings. Nevertheless, they also suggested that there should be enough participants to elicit data that allow themes to emerge, but not too many that

the researcher becomes overwhelmed by the amount of data. Saks and Allsop (2004) and Pringle et al (2011) also caution the researcher not to have too many participants as this may be a barrier to an in-depth analysis of the experiences. Brocki and Wearden (2006) completed a systematic literature review of 44 IPA studies. In these studies, there was a range of 1-35 participants. The average was 13 and median was 12.

Based on the literature, and advice sought through personal communication with Professor Paul Flowers (a pre-eminent authority on this methodology), it was decided that **ten** CRNs would be included in this study.

In this way, the sample should contain individuals who can provide a rich source of data (Proctor, Allan and Lacey 2010). This is reflective of the literature, which recommends that recruitment should lead to a narrative discourse that integrates categories, or meanings, of experiences (Giorgi and Giorgi 2004). In practice, following the first email from the local gatekeeper, twelve people volunteered to participate. Eleven met the inclusion criteria, with one being excluded as they had recently left their job as a CRN. Of the remaining eleven, the first ten that volunteered were approached.

Following successful sampling, the most important factor is that the participants should have the collective ability to produce rich, complex, yet focused details relating to the research questions; thus permitting the researcher to construct an accurate reflection of their experiences (Hanson, Balmer and Giardino 2011, Cleary, Horsfall and Hayter 2014, Yates and Leggett 2016). This was difficult to anticipate in advance of data collection, but utilising appropriate data collection tools, reflection and maintaining a reflexive relationship with the data assisted in the provision of this.

3.9 Demographic information

Of the ten participants, eight were female, and two male, seven worked in research teams with other research nurses, whilst three worked more independently. All were either NHS band 6 or 7 nurses, or University equivalents. In the locality, only the Clinical Research Facility has band 5 CRNs and there are very few band 8s. Three of the ten participants worked in the same unit; one in which research was more embedded within the overall culture. The reasons why three CRNs volunteered from the same unit were not clear. One could postulate that they were keen to share their positive experiences, that they felt more supported to participate in other research, or that this unit attracts naturally inquisitive and enthusiastic staff. Davies, Curtis and Robson (2017) highlighted the risk of volunteer bias when using purposive sampling in IPA. In determining the nature of the sample, this fact was a consideration. However, as qualitative research does not seek to be representative, this was deemed to be acceptable. In addition, I considered that whilst three participants were from the same unit, their experiences may have differed.

3.10 Data generation methods

Brocki and Wearden (2006) and Smith, Flowers and Larkin (2009) suggest that a number of data collection methods can be used in IPA, including focus groups, observational notes and diaries. However, the most frequently used method is the semi structured interview. These were utilised in this study as they allowed for the participants to explore their experiences, whilst providing a framework for discussion (Hanson, Balmer and Giardino 2011). Unstructured interviews could have facilitated a

more organic exploration of the nurse's experiences; however, there is also a danger that discussions could have lost focus (Bryman 2008).

In IPA the semi structured approach is often incorporated into an overall interview schedule (detailing questions) that allows the participant to answer key open questions, but also be invited to be more analytical (Brocki and Wearden 2006, Smith Flowers and Larkin 2009). This approach was used to provide a structure for the interviews.

The aim was for the semi-structured interviews to be conducted in a neutral environment, specifically, neither the researcher's workplace, nor a clinical/clinical research environment. This would have minimised the likelihood of disturbance or feelings related to being in an environment where they could feel uncomfortable (Opdenakker 2006, Gill et al 2008). In practice, nine of the interviews were conducted in a quiet or neutral environment and one was conducted in a meeting room in the participant's workplace. This was due to a lack of suitable space elsewhere and will be explored later in this thesis.

3.11 Supervision and support from Critical Friends

Supervision is a crucial aspect of doctoral studies. It provides guidance and constructive criticism to help the student to progress and develop through the doctoral journey (Phillips and Pugh 2010). Supervisors within Queen Margaret University fulfilled this role, providing objective and constructive feedback on the process and content of the thesis.

However, to further assist in this, two additional colleagues acted as ‘critical friends’ throughout my thesis. They are Dr Lynne Stobbart and Dr Juliet MacArthur. Dr Stobbart’s PhD explored the research interactions in a stroke unit and is the only author to have explicitly identified the concept of liminality in clinical research nursing. Dr MacArthur was instrumental in establishing the Scottish Research Nurse and Co-ordinator’s Network (SRNCN) over 10 years ago, is an advocate for CRNs and is a nurse researcher with a strong interest in clinical academic careers. They have insight and expertise in the field, as well as both holding doctoral level qualifications. According to Hardiman and Dewing (2014) a critical friend can assist in empowering nurses in their professional development. Hardiman and Dewing’s findings also draw an interesting comparison to Benner’s novice to expert model as they explain the particular importance of this to novice or proficient nurses. Other authors cite support, brokering knowledge, constructive criticism, consultant, advisor and fostering collaboration as important roles of the critical friend (National College for School Leadership 2005, Wennergren 2016). This on-going relationship was also used to verify the decision on the research questions and methodological approaches used in this study (an example is provided in section 13.3).

3.12 Researcher bias and reflection

It is important to acknowledge that researcher bias could impact on the outcome of research, especially in qualitative research (Newell and Burnard 2008), and more specifically in IPA (Pringle et al 2011) where one researcher is solely collecting and analysing the data (Polit and Beck 2008). In order to reduce the likelihood of this I retained a reflexive relationship with the situations encountered, and with the data. In

addition, my critical friends were asked to verify the emergent patterns and themes identified. A selection of the transcripts was also shared with critical friends, to confirm whether the emergent patterns and themes accurately reflected discussions. Thus, data from the semi-structured interviews was corroborated, which enhanced the trustworthiness of the findings (Melnik and Fineout-Overholt 2012, Miles, Huberman and Saldana 2014). This was a useful process as initial interpretations of emergent patterns identified some findings that were revised after discussions with critical friends. In this process there was a co-construction of meaning. These discussions were reflected upon in order to gain a deeper understanding of my own personal position as an active researcher in this area (see Appendix 2).

Such an approach can identify the researcher's influence on the process (Freshwater 2005). As previously discussed, Smith, Flowers and Larkin (2009) also promote the on-going use of 'active bracketing' to ensure that the researcher's preconceptions do not influence the exploration of the participant's experience. Additionally, bracketing should also be employed in an attempt to ensure that information from one interview does not influence subsequent interviews. In this way, each interview was given equal prominence on its own terms (Pringle et al 2011). However, when analysing the data, the wider context of clinical research nursing and the researcher's own experiences, were acknowledged as these can contribute to the double hermeneutic cycle described by Smith (2011a) and Pietkiewicz and Smith (2012). Bracketing is not a simple process and the researcher's pre-existing knowledge and perspective can simultaneously be insightful and lead to a lack of objectivity (Gerrish and Lacey 2010). However, the reflexive practices, described above, as well as on-going discussion with critical friends and supervisors, assisted in minimising the introduction of bias and

helped to ensure that my interpretations reflected the topics and the discussions held with the CRNs.

The doctoral journey can be greatly enhanced by reflection and being reflexive as it can facilitate a deeper understanding of how organisations and groups interact whilst acknowledging the reflector's power and influence (Brookfield 2015). A reflexive approach is also essential in IPA (Robertson and Finlay 2007). In my own experience, I have found that it can also assist to find value, explore potential bias as well as enabling visualisation of potential destinations and realisation of who/what the driver(s) is/are.

Reflection was used throughout this study to inform and re-evaluate approvals used. An example of this can be seen in Appendix 2.

3.13 Questions for interviews

The questions in IPA should be used to facilitate in-depth responses from the participants. Further probing should also be used, where required, to facilitate elaboration on answers (Davies, Curtin and Robson 2017). They may, and often do, change once an interview has started, but the schedule can be used as a loose agenda for the interview. This approach is especially useful for novice qualitative researchers (Smith, Flowers and Larkin 2009).

The open questions for the interviews are detailed in Table 3. They were developed from the literature and reviewed by my critical friends and Professor Paul Flowers. This review led to of one of the questions; changing "Please can you tell me about what you do in your job?" to "What is it like to be you in this job?". The difference between these is subtle, but the latter question was deemed to be more likely to elicit answers that included self-generated details of their experiences.

Table 3 – Questions to be used in the interviews

What is it like to be 'you' in this job?

Can you describe your experiences of facilitating research in a clinical setting?

What are your experiences of interactions with clinical nurses?

What do you think about these experiences?

Additional questions and prompts were used, as necessary, to probe deeper into the responses given.

The questions used in the semi structured interviews were related to the primary research question, whilst also giving the participants the scope to explore other topics that were important to them. In order to reflect on these, the first interview was immediately transcribed, questions and process reviewed and the interview analysed. This approach is supported by Smith, Flowers and Larkin (2009) who stated that it can help to improve subsequent interviews. This process mirrors piloting of data collection methods, which is generally seen to be a positive approach (Bryman 2008). This review was undertaken and, following reflection, indicated that the conversations may be more organic, relying less on the questions identified above and rather allowing the participant to identify, explore and interpret topics that were of importance to them. However, all participants knew of the aim of the study, so this may well have led them to focus on this topic. None-the-less, participants were encouraged to discuss other aspects of their role/experiences that were important to them. Subsequent interviews used the interview schedule as a loose guide, rather than more prescriptive approach.

All the topics were explored, but were generated by the participants, rather than being prompted in the interview.

3.14 Data analysis

Interview data were recorded on an electronic recording device and were transcribed by the researcher. Any pauses, emphases, laughs or other changes in tone were noted to assist in linguistic analysis (Finlay 1999). The process followed is described in Figure 3. It is not suggested that this process is linear; rather it should be iterative/cyclical. It ought to be challenging and conceptually demanding, though the results should be uniquely perceptive and satisfying (Smith, Flowers and Larkin 2009).

Following the framework facilitated a reflexive method of listening and following up on topics that the participants raised. Thereby, allowing me to respond to the details that emerged from the conversations (DiCicco-Bloom and Crabtree 2006).

* Close, line-by-line analysis of the experiential claims, concerns and understandings of each participant.

* The identification of the emergent patterns within this experiential material, emphasising both convergence and divergence, commonality and nuance, usually first for single cases, and the subsequently across multiple cases

* The development of dialogue between the researchers, their coded data, and their psychological knowledge, about what it might mean for participants to have these concerns, in this context, leading in turn to the development of a more interpretative account.

* The development of a structure, frame or gestalt which illustrates the relationships between themes.

- * The organisation of all of this material in a format which allows for analysed data to be traced right through the process, from initial comments on the transcript, through initial clustering and thematic development, into the final structure of themes.
 - * The use of supervision, collaboration, or audit to help test and develop the coherence and plausibility of the interpretation.
 - * The development of a full narrative, evidenced by a detailed commentary on data extracts, which takes the reader through this interpretation, usually theme by theme, and is often supported by some form of visual guide (a simple structure, diagram or table).
 - * Reflection on one's own perceptions, conceptions and processes.
- (Smith, Flowers and Larkin 2009 pages 78-80)

Figure 3 – Data analysis process

The analysis should be as transparently rigorous as possible to demonstrate internal consistency and connection with the research paradigm (Stanley and Nayer 2014). Without this, the credibility of the conclusions may be questioned (Gale et al 2013). Throughout this process the researcher should progress beyond simple description of the experiences; offering insightful analysis of them (Shaw and Sandy 2016).

Rigour in qualitative research has been questioned, especially if the results are superficial or of little consequence (Green and Thorogood 2007). In response to such criticism Yardley (2000) promoted four principles to promote quality:

- Sensitivity to context
- Commitment and rigour
- Transparency and coherence

- Impact and importance

Smith examined quality and rigour in IPA and produced a framework to promote an optimal approach (see appendix 4). This was followed in this study and facilitated accountability and auditability of the process followed (Smith, Flowers and Larkin 2009, Pringle et al 2011). As the data were explored manually, no data management software was used. This allowed for me to immerse myself in the data and identify key points/phrases. These were denoted by underlining, highlighting and linking of data (see appendix 8 for an example of this process).

It has been suggested that software may be used to analyse IPA data. However, Pringle et al (2011) state that this may be insufficient to produce rich data in qualitative research. Subsequently, a manual approach was used.

In a further attempt to minimise researcher bias the transcripts were also re-read before this thesis was completed. Brocki and Wearden (2006) recommend this approach when using IPA and Collins and Nicholson (2002) suggest that this can assist in ensuring that interpretations were grounded in the accounts provided.

3.15 Equipment/resources used

Stationery was required for information sheets, consent forms and data collection sheets. The main equipment that was required was a digital recorder to record the conversations in the interviews and a computer to transcribe the discussions.

Other resources included my own time and effort and study leave granted by my employer.

3.16 Dissemination of findings

The findings of the research will be submitted as this doctoral thesis. Thereafter, components will be submitted for publication and presentation at UK and international conferences. The thesis, once defended and accepted, will also be published on the eResearch system.

Initial discussions with key stakeholders indicate that the findings of this research would be of UK-wide and international interest. Discussions with colleagues in Canada, China, Ireland, Taiwan and the United States reveal commonalities in the experiences of CRNs. At the time of thesis submission, the findings from this study are due to be presented at two conferences: The International Association of Clinical Research Nurses conference in Washington DC in October 2018 and the Scottish Research Nurse and Coordinator's conference in Dundee in December 2018.

On-going findings throughout the doctoral process have also been presented at a number of conferences and meetings; including Scottish Research Nurse meetings, a NHS Scotland Research conference and also included into teaching material. Preliminary findings from previous modules also contributed to a publication in 2014 (MacArthur, Hill and Callister 2014).

3.17 Commentary and reflection on data collection

During the interviews, I noticed that the participants used metaphors to describe themselves or their feelings (for example "fish out of water"). This made me curious about whether metaphors could be illuminating in allowing the CRNs to describe their role. Subsequently, I asked the CRNs to describe the CRN using a metaphor. This elicited interesting findings. All but one of the participants provided this information. These will also be highlighted in the findings and discussion section of this thesis.

This approach reflects a component of analysis promoted by Smith, Flowers and Larkin (2009) that suggests that linguistic aspects of the discussions are important to gain a deeper understanding of the participants experiences. These can include use of pronouns, metaphors and pauses/emphasis on particular words. In this respect metaphors are seen to be particularly important. An example of how this was incorporated into the analysis can be seen in appendix 9.

It was anticipated that all interviews would be conducted in a neutral environment. To facilitate this, the local Research Nurse Manager offered to book meeting rooms. This offer was taken up and, along with the participants identifying rooms where we would not be disturbed; all but one took place in a room where we would not be disturbed or away from the nurse's main place of work. Unfortunately, in the case where this was not possible, halfway through the interview we were disturbed and asked to use another room. Whilst I am content that this did not substantively detract from the quality of the interview; it did have an impact on the flow of the discussion. On reflection I feel that I should have re-arranged the interview for a time that I could have seen the nurse in another area of the hospital. It also demonstrates that applying the plans set out in advance of a study can sometimes be more difficult than initially anticipated.

I also reflected upon the fact that, to a greater or lesser degree, I knew eight of the participants before the study commenced. I am also relatively well known to the CRNs in the Health Board, having had an on-going relationship with CRNs more widely in Scotland (see section 1.2). This may also explain the fact that more CRNs volunteered than I required (albeit with a relatively small sample size); a situation that is not always the case (Bryman 2008). This could have been for a number of reasons: the use of a gatekeeper (and the respect and high regard that they are held in), the fact that the topic may have engaged the study population, or that my own role as the researcher

may have been of consequence. On reflection, I was very pleased how open and, as far as I can tell, honest the participants were. It reaffirmed my opinion that my own role as an active researcher could be positive and negative, as I was not starting a relationship with most of the participants, so found it easier to build a rapport. Conversely, most participants knew of my previous roles in this sphere, so may not have been so comfortable discussing topics that I may have had an influence upon.

3.18 Process of data analysis

Smith, Flowers and Larkin (2009) suggested a process for analysis in IPA; moving from the individual to the group, the particular to the shared, and from the descriptive to the interpretative. They also suggest principles which aim to understand a participant's perspective and how they make sense of particular contexts. The whole process allowed for the exploration of data in terms of key themes. Smith, Flowers and Larkin then suggest a route that can be used to systematically explore the data (see figure 4). This was used to move from the data to the super-ordinate themes.

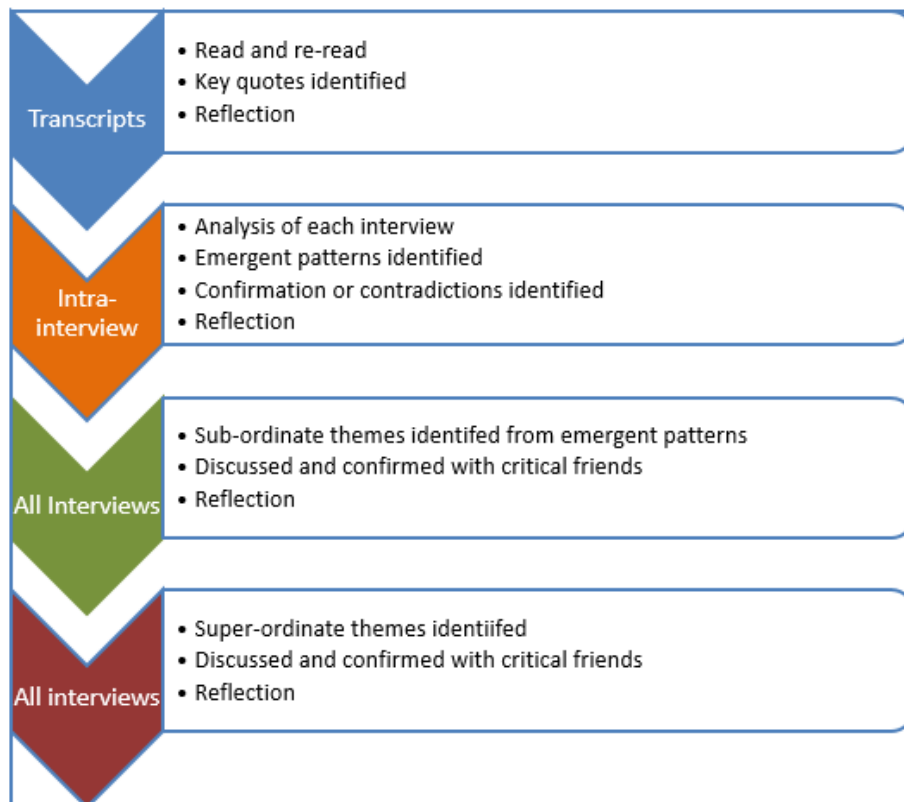


Figure 4 - Process followed to identify and confirm themes

This method was followed and, although time consuming, it led to a deeper understanding of the participant's experiences, as well as familiarisation with the full scope to the data. This component of the research took longer than first anticipated as the data were revisited on a number of occasions. This approach of cross-referencing is recommended by Smith Flowers and Larkin (2009). All data was transcribed and personally analysed by the researcher. Again, this was time consuming, but ultimately useful for me to immerse myself in the data.

This chapter has described the research question, the methodology, processes followed and identified how bias was minimised. The next chapter will explore the findings of the study and describe the themes that emerged from the data.

Chapter 4 - Findings

4.0 Introduction

This chapter will detail the findings of the research. The findings are generated from the transcripts from the interviews and the metaphors described by the participants at the interview. It should be noted that emphasis has been given to certain words in the quotations from the participants. If a word is capitalised, or has additional note in brackets beside it, this signifies that the CRN gave it particular importance.

For anonymity the participants have been given pseudonyms. Five male names and five female names have been chosen. These do not necessarily relate to the gender of the participant.

The link between emergent patterns and sub-ordinate themes can be presented in Appendix 5. This demonstrates a transparent approach, detailing movement from the data to emergent patterns to sub-ordinate themes.

These sub-ordinate themes/emergent patterns were then linked to super-ordinate themes (table 4 and figure 3). A concept map exploring how these may be inter-related can be seen in appendix 10.

Table 4 - Sub-ordinate themes/emergent patterns linked to super-ordinate themes

| Emergent patterns and sub-ordinate themes | Related super-ordinate themes |
|---|--|
| <ul style="list-style-type: none"> • Importance of clinical care • Relevance of research • Resistance • Access • Gatekeeping • Importance of other relationships • Part of team | Relationships, rapport and resistance |
| <ul style="list-style-type: none"> • Repertoire of strategies • Helping out • Quid pro quo • ingratiation • Overly friendly/charm offensive • Rewards/token economy • Uniforms • Visibility • Policies • Humour/self-deprecation • Public relations/sales • Dissemination | Strategies for engagement |
| <ul style="list-style-type: none"> • Perception of CRNs • Value of role • Autonomy • Job (in)security • Consent • Philosophy • Description of CRN role (metaphors) | Personal perspectives |
| <ul style="list-style-type: none"> • Culture • Social etiquette • CRF nurses • Acronyms • Student nurses | External factors |

4.1 Detailed exploration of super-ordinate themes

This chapter will explore the findings of this study. To do this, quotes from the ten participants will be used to highlight the experiences that they felt were pertinent. The quotes will also be used to describe and explore the participant's interpretation of these experiences. Super-ordinate themes will provide a structure for this exploration. This reflects the IPA framework set out by Smith, Flowers and Larkin (2009). Links to the emergent patterns and sub-ordinate themes identified in Table 4 will be highlighted in ***bold italics***.

4.2 Super-ordinate theme 1 – Relationships, rapport and resistance

This super-ordinate theme relates to how the participants' experience and understand their interactions with clinical nurses. This includes examples of both positive and negative interactions and an interpretation of what contributed to these. In the process of exploring this theme, there is inevitably some overlap with other themes, as they are inseparably linked. As a consequence of this some quotes may be used more than once.

The CRNs explained that they have relationships with key groups, or individuals, namely: doctors/principal investigators, clinical nurses and other CRNs. Another group that the CRNs referred to were student nurses. Subsequently, all of these will be referred to in this section, though the main focus will be on clinical nurses, in accordance with the emphasis that the CRNs themselves put on this group.

Many of the CRN's alluded to factors that demonstrated their understanding of the clinical nurses' role. Some of the examples the CRNs provided were specific to

individuals and others were mentioned by all of them. One of these was an understanding that, despite a universal appreciation of the importance of research, all the CRNs clearly ***understood the importance of clinical care*** and its need to be prioritised in a demanding environment:

Katy “I’ve always said. Your clinical care comes first. Research is second. The staff know that. I have said that. I can do what I need to do later.”

John “on the whole, I would say, you are looking after patients. That is fair enough and if I was in that role that’s how I would see it as well. Your patient is key. Clinical needs always come first”

Sarah “I always think I am a nurse first, so I help and then my research becomes second to that.”

Some, whilst not explicitly stating that clinical care comes first also acknowledged the pressures that clinical staff are under:

Peter “A large number of the team have worked in the unit, before they became research nurses, so they know about those demands.”

Janet “We are aware of the pressure that nurses are under. In terms of their workload, dealing with sick patients and distressed relatives. You sometimes think that you are throwing something else into the mix.”

“I guess for clinical staff, their main focus isn’t the research study [laughs], which is rightly so.”

Tim “I think I had worked there long enough that I could survey the department and knew how bad it was”

Tina “On the ward level, we try to delegate the minimum to the ward area, because we know that they are really busy”

Andy “You know when you go into a ward and people are harassed”

Zoe “So, you have to be quite savvy...so that you are not preventing any clinical care from happening.”

Helen “I try to place myself in their shoes and try to remember how hard it is working in a ward...”

Katy “Because of the state the NHS is in. The pressures, the targets. Not being able to deliver the quality of care that you would want to. It’s all about flow; it’s not about patient care. That’s what I keep hearing.”

These quotes appear to demonstrate that the CRNs understand the situation that clinical nurses find themselves in; thereby expressing empathy towards their clinical colleagues. However, Katy indicated that, in her opinion, the flow of patients was also important to clinical nurses.

Another area where there was broad agreement, indicated that a large proportion of the clinical nurses were supportive, particularly those who worked in a clinical environment with a more positive and reciprocal research culture. This assisted in building a rapport with clinical nurses.

Tina “We are here to support you with the research patient, but they are also clinical patients. Helping and supporting. This is important, so that the clinical team feel supported by the research team and vice versa because we work together, especially in clinical research so that we have a good relationship.”

Peter “Yeah, it is very much the culture, and is very much a strong part of the culture, even before I started, yeah now, now it is even more embedded...I think that the level of engagement between the clinical and research team has got deeper and deeper as time has gone on.”

Janet “I have a wee bit of insight into this [clinical nurses’ views on CRNs] because we did a survey in the unit. It was fairly positive. I think as a research team, we were quite surprised, because we thought we were a bit of a burden and we think we get in the way. The feedback we got was quite positive.”

This was particularly the case when the research was deemed to be of **relevance** to nursing and/or results was more tangible or immediate.

Tina “Some of our trials have an immediate impact on patients. It is a randomised interventional trial. So you see the difference. Sometimes it is quite obvious...so yes it helps, but they need to see proof that it is making a change.”

Peter “So, often we do trials that look at new devices, to improve patient care or new biomarkers that mean that patients can be discharged earlier. So, these sorts of things have a very real impact on the patient care, and it’s tangible and you can see it happening. It’s not something that then goes away and happens in a lab, and gets written up and they don’t see the relevance of. I mean we do a study where we collaborate with and [another Department] where we can demonstrably shorten a patient visit by a considerable amount of time.”

Zoe “We did a device trial to monitor vital signs and that was so nice because we were able to spend time with the nurses in [a part of the unit]. Because we were recruiting patients from [there] and for the nurses they were able to see an intervention that would make a very direct effect on their practice. So, there was

this huge buy in from them. It was brilliant. We even had the nurses wearing them and trying them out.”

Helen “We looked at pressure area care. This really was a big one for me, across nursing...So you are up on the wards chatting to nurses, that was the sort of thing that nurses were extremely interested in and how research fits with everything. Then people are more inclined to, yeah, help you out.”

These contributions indicate that CRNs can have the support of colleagues, especially when there is a positive culture, or when clinical nurses see a benefit in the research that is being conducted, either for themselves, or the patients that are participating.

Another point where CRNs may be more accepted is when there are no treatment options left for patients. Clinical nurses then appear to be very positive, and actively seek out research projects that could provide an option for the patients.

Sarah “There is nothing to be offered to some of the patients we see, and when those patients come in, I think the CNSs [Clinical Nurse Specialist] feel that they have nothing to offer them and so when those trials come up, the nurses offer it to the patients and they actively seek out the person who is responsible for those trials; because, I think it feels like they are doing something for the patient.”

On another occasion Zoe felt more comfortable about approaching a patient when a study like this can be offered.

Zoe “It is interesting...one study there is very little that we can do for patients, so we were offering potentially something to help them, so you feel very, very happy to approach those types of patients.”

However, to varying degrees the CRNs also discussed either less positive experiences with clinical nurses, or occasions when clinical nurses could have been more helpful. These experiences manifested themselves in a variety of ways, from a lack of enthusiasm to distinct negativity. The following are examples of some of the lowest level of **resistance** that each CRN discussed.

Tim “Most people were supportive and curious, but there are a few characters that, especially if they don’t understand the role of a research nurse, or have no idea what you do, or what you are doing and didn’t really have any interest, then they would be thinking “You should be helping us, because you can do your job whenever”, that was quite difficult”

Katy “The problem is that research isn’t always high on their agenda. It is just to keep the momentum going. Everyone is busy, and their priority is clinical, mine is research.”

“There are quite a few staff over the years have been entrenched in their negativity.”

Sarah “I kind of arrived and no-body knew...” “Who is this person?” and “What is her role?”, “What are her responsibilities?”. “She just seems to be swanning about, not doing very much”. Emm...and that has been difficult.”

Janet “Even putting that all in place and giving them all that information and giving a full handover, sometimes then things won’t be done. That’s fine, that’s the reality of research in busy clinical environments in the NHS.”

Tina “Sometimes research patients seem to be identified differently: “Ah, they are a research patient”, but they are still a clinical patient, they are not an alien! So, they are labelled.”

Peter “There are times when a patient is discharged before you have a chance to see them. Even though you have put a note in the patient records to say please contact the research team. Some people don’t want to, or they forget to. It is hard to work out sometimes. That is what I mean, not everyone is like: “Research is great, we are part of the team” ‘cos that is just ridiculous. Some people are just not that interested. Some people are there...it’s not their bread and butter. I think that is just about how you manage that.”

Zoe “Somehow this patient being in research was a negative to HER care and that she was protecting the patient and I was against the patient.”

Andy “I would say they are tolerant of the research nurses, they’ll speak to us, they’ll answer our questions. They might even do some stuff for you.”

Helen “It’s REALLY under their feet and that one I know people found difficult because the staff [nurses] were really quite resistant to us being there.”

John “I think ward nurses see research as an extra and probably a bit boring”

These largely appeared to offer a slight impediment to the workings of the CRN. Some also indicated that there may be a perception that patients involved in research may be treated differently. However, some of the CRNs also experienced more significant resistance from clinical nurses, which made carrying out their responsibilities more arduous and stressful.

Helen “It DID feel like that, because the nursing team weren’t supporting you. So, you did feel a bit, sort of, [pause with emotion in voice] emm, it wasn’t a great feeling. It wasn’t a great feeling... it did make you a bit anxious what the knock on effect would be either you know you had some sort of terrible impact on the list or held

back surgery for someone. You know, worst case scenario that you had caused that to happen.”

“There is a certain amount of avoiding. We had a lot of problems with one nurse, there was no getting round it. They could not be charmed in to being nice to us, but we are absolutely, totally reliant, on us going over there to get the information from this person...It DOES take its toll if it continues to be difficult. I’m not sure if, or I have a sensible recourse, if my just being nice to people, doesn’t work. If that doesn’t work, I don’t know what to do next [laughs]. I think find a way of avoiding it. Or maybe you just get used to it. Maybe you just tolerate it.”

Zoe “There are still people that you DREAD having to go and speak to. So, we had a patient a couple of days ago...It was this one particular person [a nurse], who I knew is going to be not very happy about it...you still dread it, you have to psych yourself up for going into the office to tell them. Even though her manager, everybody under the sun is completely happy with it, it doesn’t matter you know you are going to get “Scough [derisory noise]”.”

“I was thinking about coming to speak to you, because when I went into where this patient was, in [other speciality], this nurse was, like the exchange there was quite typical of what I hear a lot of my friends talk about in terms of their relationship with clinical nurses. The reason for the conversation and how it went was a lack of communication, a lack of a better handover and the fact that the [study drug], is supposed to run over X hours...when I walk in at 4am [they] were sort of going “Where have to been?...we really should have taken these samples for our patient” She was kind of saying that we were putting this patient

in harm because she was in a research project. Which was kind of like: “What do you think I’m doing? Look at my badge I work for the NHS, I am not here to make money from this drug”.”

“I was just really affronted by her and, my colleague and I joke that we have our black list people. I was saying to her: “Black listed - absolutely” She was really challenging me by insinuating that I was, in some way, harming this patient.”

Janet “A bad experience would be having a cubicle door slammed in your face when you are trying just go in and see a patient...it can be quite stressful”

For the CRNs in question this had an impact on their perception of their work. Helen expressed feelings of foreboding about going into work, because she was anticipating negativity. She also later expressed that she had developed coping mechanism to manage this, but felt bad for her junior colleagues, who may not have known how to navigate situations like these. Zoe’s experience was by far the most acute. She was visibly shaken when she was describing the experience that she had had, and later stated that this exchange left her very angry. Zoe also disclosed that some clinical nurses are on a “**black-list**”, because of the difficulties that they face when interacting with these nurses. Janet, Sarah, Tina, Helen, Katy and Tim also stated that they had to manage “difficult” or “challenging” characters and that this could cause stress and, consequently, increase their workload. Furthermore, Sarah reflected that the attitude of some nurses, and a perceived lack of value in her role, frustrated her and had an impact on her ability to undertake her duties. However, this may not indicate that these nurses have a specific issue with research. It may be that they expressed negative feelings about other aspects of their work. This was also a perception of Sarah. The

clinical nurses may have had a different perception. Indeed, Janet discussed that they may have other reasons for reacting in this way.

Janet “Yeah, if you have a nurse who is having a bad day, that can be quite challenging. If you need to be in communicating with them about their patient. So, there is that person that I mentioned that we often have issues with, but even people who are open to research can have a hellish day and be stressed up to eyeballs.”

The concept of harm was also raised by another CRN, though not in as negative terms as Zoe.

Sarah “So that they know that if they hand over a patient to you, that they trust you, that you’re not going to do any harm. So, that takes time to build that relationship up.”

Additionally, Sarah and Katy also discussed that some of the reasons that clinical nurses react in this way could be related to burn-out or feelings of stagnation. Two of the CRNs (Zoe and Helen) also became quite animated when describing responses from clinical nurses on this topic, indicating a particularly strong reaction.

A potential issue that seemed to be consistent in almost all of the CRNs experience was the perception that clinical nurses took on a **gatekeeping** role. This was sometimes received positively, providing information relating to potentially agitated patients, or for relatives who had just received bad news. However, more frequently a gatekeeping role was perceived to be arbitrary or unjustified. In either case, this potential barrier to having a conversation with patients or relatives impeded their ability to make autonomous decisions regarding their participation in research. This is

something that the CRNs are aware of, but clinical nurses did not appear to consider.

Examples of gatekeeping are:

Zoe “The staff were saying to me: I don’t think you should go in, but you are always...there is this moment in your head. “Is this appropriate for me to go in?” and you kind of have to overcome this. She is eligible for this, so there is massive approval for me to do this.”

Tim “Sometimes the nurses are a bit more gate-keepery. When you say that you are going to see that patient, they are like “Oh, I know, but they are really sick” it’s like “Yeah, I know. Is there a reason why I can’t approach them or their relatives about this?” “Yeah, they are really sick”.”

John “You’ve got to say that, there are some nurses that were like “What? No!” [with a condescending voice]. They are protective of their patient...then the main challenge being the nurse in the bed-space, but they don’t know my study. They don’t know what is going on here.”

Andy “That is just checking in that it is appropriate for me to go in and see the patient. You can get some information that way: “he’s not having a great morning” or “You gave him that sheet yesterday and he has been really anxious since and has been asking loads of questions”. So yeah, from an information as well as a courtesy...If the role was reversed I would like to think that they would come and say to me “I’m just going to go in and see this patient”. That’s not to say that I feel as if I need to go through them, but more of a respect for the territory, if that makes sense. It’s not MY ward.”

Janet “And it is really important to listen to what they are saying. You know, if they are saying “You really shouldn’t speak to this family” we take that into consideration.

But you have to be careful because I remember nurses saying: “oh, but this patient is very sick” and you would say “Yeah, I understand but we are doing research in this area with very sick patients” and that is OK, but there will be times when that is not OK. Again, I think that has to do with their understanding. They very much think they control access though, definitely. They are the gatekeepers.

G: Can you tell me a bit more about that?

The nurses at the bedside are very much the gatekeepers to getting in to that bed-space or not. Unless you wait until they go on their break [laugh].”

Peter “The other day I was talking to a nurse [redacted] about her patient and because I had done that she obviously thought “Yup, he knows what he is talking about, I’m quite happy for you to talk that through with the patient”, because they can see that you know what you are doing.”

Sarah “As a courtesy...I would go to them and say “I am thinking about approaching this patient, what do you think?”...They [clinical nurses] often say no. They often say “I don’t think that patient is suitable”.”

“As an adult, they can make a decision. I sometimes get a bit frustrated. I found that in my [previous] role: “You can’t possibly speak to that family, they are far too upset”. How long have they known that family for? It’s the same with...for patient’s involved in difficult trials. It is up to the patient to make that decision. Not the gatekeeper.”

“You have to skip the gatekeepers”

“So, that is one way around it [gatekeeping], to include them”

John's experience highlighted that the clinical environment may be a consideration. In his area there are nurses at each bed-space, thereby potentially making the need to seek the permission of the clinical nurse more acute. Andy, Sarah and Janet highlighted a situation that the CRN, by way of courtesy, is giving the clinical nurse the opportunity to be a gatekeeper. This may be a way to cultivate positive relationships, but could have more negative consequences for the research, as seeking permission to speak to patients may become an expectation. Peter's experience highlighted that gatekeeping can be used to validate expertise. However, it does suggest that CRNs may have to prove themselves. Sarah, also highlights a point of discussion that others also debated. Namely, to go through, or round gatekeepers.

Other relationships also emerged as being of importance.

Clinical Nurse Specialists (CNSs) appeared to play a role in the success of research. Two of the CRNs found their input to be somewhat negative, whereas others indicated that they could facilitate recruitment.

Katy "Quite often because I'm seen as a lead research nurse and not a nurse specialist, though a lot of my skills are up there with all of them and sometimes slightly better in certain subjects then I don't know if...my relationship isn't as good as it used to be. You just get a feeling that you are not as welcome as you used to be. It feels like there is a lot of resentment about the freedom I have in the job. Perhaps the autonomy. I am not micro managed, perhaps they feel they are.

To be honest it doesn't make me feel anything. It is not a problem I have. It is problem they have. So it's their issue to deal with, but I have never been able to get them to help me with recruitment."

Sarah “It’s clinical credibility. That hits it on the head. These are experienced specialist nurses who have worked with the disease for a long time...and I’ve worked with it [for relatively short period of time]. So, what do I know? [Laughs]. Despite the fact that I have been nursing for more than 30 years, what do I know? [Laughs].

G: Do the specialist nurses ever refer patients to you?

No

G: Could they?

[Emphatically] YES!

[in a whisper] I think they are very busy. I think that they are burnt-out; if I’m honest...em...I’m not sure they see it as being their role. They don’t think it’s their responsibility.”

In this short portion of the conversation Sarah laughed, spoke loudly and whispered. This had the effect of conveying the highs and lows of her work. It may also indicate that she has resorted to humour as a coping mechanism. The hushed tones may also have indicated that the information was more sensitive.

Contrary to Sarah and Katy’s experiences, Andy indicated that CNSs are an ally and can help to identify potential study participants.

Andy “G: Do the CNSs ever refer anyone onto you?

Yes, some do, which is brilliant. That has been really helpful. The more you deal with people the more they know who you are. That was facilitated by my nurse manager and the PI.”

Doctors and principal investigators were also highlighted as another key relationship for the CRNs. Whilst this is not the focus for this study, it became apparent that the relationships with doctors did have an effect on how the CRNs were perceived by other nurses.

Tina “I think as research nurses we work very closely with the consultants and sometimes I think that we have this special relationship with them. It is different than the staff nurses on the ward. This is very personal”

Helen “Sometimes the PI takes us up and introduces us. Does it help [asking herself]? Not always. Does it separate us? You know the clinical and the research nurses: “Here’s my research nurse, she’s going to come along and do this” Consultant-research nurse-nurse. Does that separate us? Is it possibly better for me to go in my uniform and say “I’m working with consultant X on this study, I’m going to be doing this sort of thing” Maybe it makes it easier to bridge that gap. I mean particularly if it’s a challenging consultant, cos you can team up together, cos that is gold [laughs].”

Helen went on to explain that the PI is more useful as a conduit to other medical staff, as they are less inclined to do what a nurse asks them.

Tim also identified that being seen to be too close to the medical staff could be detrimental to the relationship with nurses.

Tim “I don’t want to draw on that as a nurse. I’d rather gain my relationship with the nurses. It is something that worries me, especially in the [speciality], because I am not there every day, as much, but often I will be talking to the consultants, because they are the ones I have grown up with and, or work with, and it worries me a lot about the nurses thinking “Oh, those research nurses are only talking

to doctors". So, I make sure I make a big effort to make sure I introduce myself to all the new nurses. I'll always talk to them, because they are just as important to our success of being able to conduct research as the doctors are...I think it would be detrimental to the relationship if you didn't have a relationship with them [nurses] and they only saw you talking to doctors. I think...I am first and foremost a nurse, and I am proud of that. So, I am keen to engage nurses as well, in the research, because they are not so, they don't have to do it as much as the doctors. They don't have to do it as part of their training, so it is also another reason why it is good to keep a good relationship with the team."

Zoe "We also go to handover every morning, well the doctor's handover, and the nursing handover, less frequently because, for the doctor's handover, we get to run through all the patients, so we very quickly, at the beginning of the day, know who is going to be eligible and who is not, without having to go to speak to clinicians. The nursing handover is literally: "You are going here, you are going here, this is the safety brief" and then they will go"

Janet also emphasised that there were some differences, as the CRNs were involved in the induction of the doctors, but not the nurses. However, she also indicated that the CRNs attend the senior staff bed meetings, in which both the senior nurses and doctors discuss the patients in the unit.

Janet "One of the things that we do now is that we attend the morning bed meeting so we are in with the consultants and charge nurses when they are discussing the patients."

Andy added a different perspective to this relationship, as he was keen to make sure he came across as being competent to the PI. He felt more confident with other CRNs

or more junior doctors, but not want to expose his lack of speciality knowledge to the PI. This could be because the PI is frequently responsible for finding funds for the CRN's salary.

Andy "Depends who it is. If it's my [research] nursing colleagues, no problem, research fellows – no problem. PI territory – you feel like a bit of an idiot; asking something that you think you should know, but you don't know what you don't know."

Katy disclosed that the PI can apply pressure to recruit, linking recruitment to commercial trials to job security. She clearly understood that if patients were not recruited, then funds for the salaries of the CRNs would be diminished.

Katy "I guess that links to income generation...we know that with one study we need to recruit 15 subjects to generate 1 years salary surplus, but you are always on tenterhooks. Achieving that gives some recognition, between the two of us anyway.

G: How does the link between recruitment and income make you feel?

It's essential, but kind of scary. Recently we had a scare we had a project that was due to start last February, with 3 years salary so it hasn't started and our salary pot is low because of that. Because there is less than is required in our account, I thought I was going to lose my colleague, so we have had to creatively plan the next two years in order for R&D to cover the salary. So that is reliant on us meeting our targets quite heavily but our PI has changed and he's not as research active and he needs a bit of guidance."

Katy also identified that she had to train and supervise the doctors on her studies. As they were less knowledgeable about research.

Katy “It’s all about patient safety. That is why we are employed. If we weren’t here I dread to think what would happen. With medics having free reign and having protocols, but not knowing how to follow them... A lot of them have a great idea for research and that’s where their knowledge ends. And it’s guiding them through the process, of ethics forms, introducing them to the right people within the board, other people who’ve tried to go through that journey to form the basis of networking. Map I suppose.”

The participants also identified that the relationship that they had with other CRNs was of importance, as they could provide leadership and be supportive.

Katy “You know, we are a small team and we know when we have done something well. Emm, you know we don’t need formal one-to-ones because we have that all the time and give each other feedback. And you can say to each other, that was a good study.”

Sarah “I am hoping that, with the personalities involved [locally], like [the Clinical Research Nurse Manager - named] and [Senior Nurse for Research - named] are coming together to try to build a collaborative workforce between the University and the NHS I think is very positive and I think that is the way forward.”

Tina “OH YEAH, yeah. I think I have been very lucky working with the team that were already here...Having the team in place, they are very supportive and you are valued. This makes a big difference. If you are CRN if you feel valued, you can do anything. If you are motivated and you have the support, you can do anything.”

Andy “I think there is a lot of support in a large unit, like the [central research unit], there is the support, lots of opportunity for variety, for training.”

“I’m forever name dropping my senior colleagues, because they are known, therefore it makes it easier. Does it make it easier because they, therefore, know what I do, emm that they know and have a professional respect for that person, does that have a knock on effect for me? I don’t know. It is easier though.

G: How important is the research team?

It is, especially as a fledgling research nurse. Having the senior colleagues. You are doing the same thing, you’re breathing the same air. There’s someone else to ask.”

This emphasises the perceived importance of social capital for the CRNs. This was highlighted by a number of the participants as a route to gaining respect with the clinical nurses. This was explicitly mentioned by Sarah, and referred to by others.

Sarah “It’s all that social capital stuff...You have to prove yourself”

Peter “The other day I was talking to a [nurse] about her patient and because I had done that she obviously thought “Yup, he knows what he is talking about, I’m quite happy for you to talk that through with the patient”, because they can see that you know what you are doing.”

Tina “Quite often I’ll name drop, my line manager’s name. They don’t know who I am, but they know who she is and what she does.”

An important issue for the CRNs was whether they felt **part of the nursing/clinical team**. When it works, this appeared to signify some legitimacy in their role and

facilitated feelings of value in their contribution to improving patient care. Conversely, when this was not the case it led to feelings that their role was poorly understood.

Sarah “Emm, there is no interaction with the clinical nurses at the moment. That may change, but for all the plans and ethos to dovetail care and research in the NHS, it’s not. I have no idea who any of the clinical nurses are. If I needed, you know, advice. I would go to a medic, that I should be able to go to a nurse. Clinical nurses should be able to go to CRNs and see what we are doing. Then, they could look out for potential participants for us.”

“I think that you can be seen as part of the team, because you can spend a bit of time with the patient. To be seen as a positive”

Janet “There is a bit of “Should research nurses be having that first approach there? Looking at notes”. So, it is really important, to make that work, that we are considered part of the clinical team. So we are in that environment, we are not just coming in as visitors to get doctors to identify who the patients might be. That just wouldn’t work. So, it is really important that we are in the team to make the research work. We are part of the daily routine of the wards. We have been there for years now, 10-15 years.”

Peter “When I started working for the team an SOP [Standard Operating Procedure] had just been signed off by R&D just cementing the place of CRNs within the clinical team, so we are very much seen as part of the clinical team in the [department] and other specialities that we collaborate with and as mandated by protocols. So it’s not a case of us waiting to have permission to screen or approach patients, we are already seen as part of that clinical team, so we have that access to patients, and that is governance in place to say that is the case.”

Helen “So you do feel exposed anyway and then...as a nurse I am used to working with a team of people. I very rarely feel like I am out there on my own. It DID feel like that because the nursing team weren’t supporting you. So, you did feel a bit, sort of, [pause with emotion] emm, it wasn’t a great feeling. It wasn’t a great feeling.”

“G: Do you feel like a part of the nursing team in the areas you go to?

No. Categorically, no. I never do. Emm, I guess because there is a team there, you can see it and you know you are not part of it. Emm, I guess because if anything were to happen I would be as involved as anyone else, but I would also be separate. I guess my aims are slightly separate to the care team and it does separate it. Also, and maybe this is the crux of it. You go in, and then you leave, those guys are there for 12 hours. You are a transient member of the team...”

Katy “G: Do you feel part of the ward?

Yes (hesitantly). Not a full part of the ward, but part of the team. The geography helps here. When there is a Christmas night out everyone is invited. The Physios, the OTs everyone. Everyone is in a tight group...Yeah, not a full member but I don’t feel like I need to peep around corners. It is relaxed. Everyone knows who I am.”

John “G: Did you feel part of the [clinical] team?

Yeah, that was because I have worked there for 7-8 years.”

Tim “I think it’s incredibly helpful. It means we can share our successes with the clinical team, so they feel like they have been part of them. It means that we

know the team a lot better, because we are in the department; probably 2, 3, 4 of us throughout the day, constantly talking to the nurses and doctors about the patients that we are going in to, to check if they have any issues with us approaching them for abusive reasons or cognitive reasons. Checking eligibility with the team.”

Zoe “So, we’re regarded as part of the [speciality] team, so we can screen every single person who comes through the door.”

Tina “We are here to support you with the research patient, but they are also clinical patients. Helping and supporting. This is important, so that the clinical team feel supported by the research team and visa verses because we work together, especially in clinical research so have a good relationship.”

Andy “I feel part of the research nursing team, but not part of the clinical nursing team. I don’t know. That could be related to my gaps in knowledge, having not worked in those units before, emm. Would I feel differently if I was a research nurse working in [a speciality that he was more familiar with] or a CRN that was then working where I know the unit? I don’t know, but it’s a funny one. Certainly part of the research nursing team, but I wouldn’t say I feel like one of the nursing team. I don’t know why...my own perception, confidence?”

In this last quote, Andy raises an important point. On reflection, I feel that I should have perhaps made a distinction between the clinical team and the nursing team. I had presumed that they would be synonymous. However, this quote perhaps indicates the contrary. Unfortunately, Andy was one of the last interviews undertaken, so I was not able to explore this with the other participants. This could be a limitation of the study.

Helen conveyed that she missed the strong feeling of solidarity that she felt when she was working as a clinical nurse. This is something that she had not been able to replicate in the CRN role, though she thought that this was a reflection of the nature of the work that clinical nurses undertake.

Helen “It is very satisfying when you overcome those challenges, but I think there is also something about you build a really strong camaraderie with your team in those stressful situations. You REALLY rely on each other, in a different way to the way we rely on each other...I do miss it. I think I also miss the immediacy of that help. So, I think all nurses are in it because they like to help people. You work acutely, you get that hit straight away. They come in the door, you help them and then get a bit, you know, you stabilised them. That is extremely satisfying. The people I help now are going to see the benefit of it in 20 years time. So, that immediacy you lose. Yeah I do miss it, I do. Yeah. I always used to say that, of the guys I used to work with acutely, we really did know the best and worst of each other.”

This super-ordinate theme has explored how CRNs perceive research in relation to clinical care. It has also explored both positive and negative instances that the CRNs have experienced and what can contribute to these experiences. Some CRNs experienced more problematic interactions, detailing how these made them feel uncomfortable and potentially acted as an impediment in developing relationships. Other sub-ordinate themes were explored including gatekeeping and relationships with other members of staff (including doctors, clinical nurse specialists and other CRNs).

The next super-ordinate theme will explore strategies that CRNs employed to build and maintain positive relationships.

4.3 Superordinate theme Two - Strategies for engagement

In order to build positive relationships, the CRNs employed **a repertoire of different methods**. Some of the CRNs indicated how crucial this was to gain the confidence and co-operation of the clinical nurses. However, methods of engagement varied greatly.

Helen “I chat to them a lot about what we are doing because I find that if nurses have a chance to stop to take a breath are fascinated by research, almost across the board.”

Peter “I mean there have been a number of ways that we engage with the team in terms of we will always be one of the groups that new start nurses will meet on their induction and we’ll have half an hour with them and impress, really, what we do.”

Katy “It’s developing relationships. And that is key to that job. With key departments and key people within these departments. And just being friendly and open.”

John “So, you want to promote it in the way “Hey, look I’m here. I need to do this important research. I don’t want to get in your way. If I can help you in any way, I will do, but I’ve got my...eh...let’s have a team approach. I will involve you if I can, if you want to”. “

A key pathway to achieving this was to help out with clinical care and, importantly, to be seen to be **helping out**. This also represented a **quid pro quo** or reciprocity with clinical staff. Though, it did appear that the CRNs were initiating these interactions, by way of building up feelings of goodwill with the clinical nurses, rather than wholly for the patient’s benefit. Tina, in particular, found this to be a useful approach.

Tina “We are here to support you with the research patient, but they are also clinical patients. Helping and supporting. This is important, so that the clinical team feel supported by the research team and vice versa because we work together, especially in clinical research so have a good relationship.”

“So we said “Can we take some blood for you?” “Shall I do an extra copy for you?” So, really working and helping in parallel. If we can, we are happy to help.”

“One day they [clinical nurses] were asking for help and I was there, they would ask me to help. This is very useful. Anything you can do to help the clinical team, because they are very busy...We do not want to add to add to the clinical staff workload, but at the same time you want to do research.”

John “It takes time to get the nurses on board, to promote it to them. You know, you are not a threat to them. You are trying to do your best, tell me what to do...if I can do anything. You know, letting them know that you wanna help.”

Andy “But equally, you can be helpful, when you can. Say for example, you are taking off a set of bloods from someone, you ask if you can do any bloods for them, at the same time. Not only helpful for the patient, but it might also sweeten the deal, for clinical colleagues.”

Sarah “It is really important, in that situation. If you can do something that the clinical team could do...that is to everyone’s advantage [pause] it really helps with relationship building, for obvious reasons. That frees them up to do something else.”

Janet “Sometimes we also try to help out. You know if the ward is really horrendous we will ask if we can help out...We do act as a pair of eyes if the nurse needs to nip off for something. “

Helen “Another thing that I do is make myself useful. If blood needs taken, if a cannula needs to go in, if someone needs taken to the toilet, then, um, I’m there. I can do it, that’s not a problem. It’s for the next time you go in. If you have been useful, I think people are more likely to be helpful, in return, because you have helped them. People remember that.”

Peter “They know that we will, you know, and if the unit is busy, like it is at the moment, we are quite happy to go in and help by, you know, toileting patients or giving treatments, or to make up antibiotics, or whatever. We recognise that we are all working together in the department. So, we will do that, because we are part of the team.”

Peter also appeared to equate helping out to ‘nursing’ duties. Thereby, potentially, indicating that the CRN role could not be described as such.

Peter “I think particularly because they don’t just see us walking about with the age old thing about walking around with a clipboard, not really doing anything, so we will do nursing things.”

However, Tim also reflected that this relationship can be beneficial to the patient. Highlighting that one of his elderly patients had had her best experience in a hospital as she participated in a research study. Largely, this appeared to related the increased nurse-contact that this resulted in.

Tim “We have another patient, that after taking part in a drug trial, she was [elderly]. She said it was the best hospital experience. One, because people visited her,

we have to see her every couple of hours, so she just felt that had more company. You notice things, because you are in with her. You notice her drip is finished, or that they haven't passed any urine. So, you are feeding these things back to the clinical team and I think that research can improve patient care, but I think that they get more attention, because they are in research."

Tim also expressed that he felt feelings of guilt and sometimes asked his manager if he could help when things were especially busy.

Tim "Well, I think I had worked there long enough that I could survey the department and knew how bad it was and if it did look like clinically it was becoming unsafe, I would go to speak to my line managers and say "I think I really DO need to go and help". Emm, just probably for my own guilt."

But also realised that this was not something that could be assured of.

Tim "I didn't want to get into the habit of that, because I was being paid to do another job, so you had to be quite strong and say "No" unless it was close to being [a significant event]."

Though Peter expressed that helping does not always suggest an ulterior motive. It is sometimes done because the CRNs in his unit are part of the larger team.

Peter "Sometimes you do think, it would be really good for me to go and do something for this patient because it would help the nurse out and ingratiate me, but that's not the driving factor, because often you are just doing it as part of that. We very much try to see that we are all part of the same team"

Along with helping out, another tactic that CRNs appear to employ are apparent attempts to **ingratiate** themselves on their clinical nursing colleagues.

Katy “Again, it’s playing games. Trying to be Mr nice guy all the time, even though you don’t want to be. Trying to work round people.”

A strategy to ingratiate oneself was described by some CRNs as being ‘**overly friendly**’, apologetic or having a ‘**charm offensive**’ as a means to build relationships with the clinical nurses.

Helen “I try to be really friendly, to the point when I think I’m a bit of a grinning idiot.

“Hi it’s me [name] again, nice to meet ya..” yeah, I do that. So at least they remember who I am the next time...“It’s you again” you might be a pain, but you are pleasant to have around”

“I think people find it difficult to be REALLY unpleasant to someone who is being REALLY nice”

John “I think I am overly positive.

G: Is that helpful?

You have to. It is a bit of a survival technique really. If you are not enthusiastic about your study, nobody is going to be enthusiastic about your study.”

“I can go back to the office and mouth off, but no you can’t do that on the wards. AND polite. You have to be overly polite. Manners.”

Zoe “Especially for a research nurse, who is going into different places at different times. The way you introduce yourself, the way you interact, trying to be humorous, trying to be helpful, all the rest of it. It is massively vital. If you, yeah, I think it is vastly, vastly important.”

“It all just defaults down to research being this extra thing, this burden, this thing that is over and above clinical care. That is not what any of us in research want.

We want it to be part of clinical care, accepted that patients will be in research and that it will be normal. Maybe we re-enforce that it is an added extra by saying “Oh, I am really sorry”, “Sorry to bother you”, “God I am bothering you again”. We employ that tactic to get what we want, but maybe we are re-enforcing something negative about research.”

Katy “It’s like I know it’s not your priority and you have a dozen other things to do, but you have to recognise this and apologise and do as much as you can to make their life easier.”

Andy, in particular, identified that this was a strategy that he used to build relationships with clinical nurses.

Andy “Lots of just “thank you very much for...” almost gushing with thanks, yeah, but if you are thanked you’ll maybe do it again and not mind so much, or “really sorry for interrupting that”.”

“thank you very much for all your help”. Even if it’s something miniscule that they have done [laugh]. All you have done is said “Can I speak to this patient?” and they’ve said “Yeah, fine” and you speak to the patient for 5 minutes. The nurse hasn’t actually done anything for you at all, but it’s still “Thanks very much”. Are we just subconsciously, you know, having some sort of discourse with them, so that they remember who you are.”

“I would say they are tolerant of the research nurses, they’ll speak to us, they’ll answer our questions. They might even do some stuff for you. When you do that, you’re adding to their already busy and over-stretched workload. I don’t know if that is why research nurses fall over themselves to be polite, just on the occasion that you are going to ask for a bit more help. It’s easier to do so.”

“When patients come in to our research clinic, they are not here for any clinical care, so the only time we would need to interact with the nurses would be if we needed to borrow the ECG machine. I know where it is, but I will always ask for it and “Do you mind if I borrow it?” Just to keep that relationship of positivity.”

The CRNs also alluded to resorting to providing the clinical nurses with **rewards** for helping with research. With some recognition that this might characterise some elements of a **token economy**. Conversely, this might represent a legitimate appreciation of each other’s work and contribution.

Katy: “Haribos are a good source of payment for things. We do that around the country actually...if you do someone a favour, a packet of Haribos arrive in the post [laugh]. It’s a token economy, but it’s a nice thing to do.”

John “We’ve done quite well in...say you are getting consent, and you need someone to witness, and it needs to be someone not involved in the research; it has to be a member of the clinical team. So, in telephone consent, or if we are asking them to take an extra blood, or if we are asking them to do anything really. We often offer letters to support nurses’ revalidation.

G: Ok, wow.

So, “Thank you very much for helping us with this research. You obviously understand that research is really important”. Yeah, the revalidation thing has been really good...I wouldn’t say bargaining. You don’t bargain, they don’t expect it and then when you do do it, it’s like “That’s really good”. So, they are pleased.”

“We have mugs, we have pens emm. Bribery? [asking himself] I don’t know, do you call it bribery? Emm, a token of thanks, but we always try to do that, so that they are trying to get something out of the study running on the ward.”

Tina “if we do need an overnight ECG ask in the nicest way possible and where there is re-imbursement, trying to find out what the training cost code is, so that we can send some money to their training budget.”

Some of the CRNs made the link between helping out and whether they wore a nursing **uniform**. The CRNs had contrary opinions on this; whilst they acknowledged that they would be happy to participate in care, they also indicated that the lack of a uniform protected them from being asked to participate in care delivery. In the Health Board in which the research was conducted, some CRNs wear uniforms, whilst others wear their own clothes.

Peter “Yes, so we don’t wear uniforms and that is a choice for most of us. We can wear uniforms if we want, but I think, certainly for me, if I was wearing a uniform it is a different...it’s the perception of patients and relatives, because they think “there is a nurse who’ll come and answer this, or do that, or be able to tell me what is happening with my father, or whatever.”

“I think they think that just because you are not wearing a uniform that sometimes you actually are not doing clinical tasks. I think the uniform is a big thing, because it is an easy visual. They think “you are a nurse, but you are not wearing a uniform, so you must not be doing clinical tasks”.”

Janet had the experience of two jobs. In one, a uniform was worn and not in the other. Her appreciation of the differences was insightful.

Janet "I think it helps that we don't wear uniforms. In my last job we did and I used to be quite pro uniforms, but now not wearing a uniform I can see the benefits of that. But in terms of going into a ward in your own clothes you would get far fewer interruptions that you would if you were in uniform. I think that if it did wear the standard uniform I think I would feel terrible because people would be thinking: "Why doesn't that nurse answer the phone? She is sitting reading notes!" I guess I can see the benefits and drawbacks of both. Perhaps separate uniform would be good. But I suppose you can't have it all. If you wanted to be recognised as a nurse, you would have to wear the standard uniform."

Andy had a similar experience and demonstrated comparable feelings.

Andy "I don't wear a uniform now, so I'm not mistaken for ward staff, which would quite often be the case [in previous research role where a uniform was worn]. Emm, patients or relatives, doctors, physios would ask you about patients. I hate to say I don't work here, cos we all have the same goal and are looking after the patients "I'm terribly sorry, I'm a research nurse. I'm not based on this ward, but I may be able to help you".

Whereas now, without a uniform, you immediately stand out as being something different, but there is that big questions mark of what are you then? You don't have a uniform, you're not a doctor, so who are you?, What are you?

G: Who is that from?

Emm, nursing staff. You always try to introduce yourself, but you will get this look of: "Sorry, who are you?" [laugh] Quite rightly too. Uniform can be a bit of armour, as well

I prefer not wearing a uniform. We used to have a separate uniform in the [central research unit], which was absolutely fine, because you were identified as being clinical, but you weren't part of the nursing team. Then, a few years ago, when they standardised the uniform, that is when you are being mistaken for, you know, a member of staff on the ward. You know, "Nurse, I need this medication" and then you'd be off trying to find someone who could deal with that. Although, you'd want to help as well, and I sometimes did. If someone, "Can you help me up to the loo?" and I did. Just because you are not there, doesn't mean...and I still would now. If someone needs help getting back into bed. Right, Ok, let's go. Cos I'm certainly not going to go and tell someone, who is already stretched, if I can the capacity, I've got the time."

Helen does wear a uniform and also perceives it to be useful, acting as armour.

Helen "I am a fan of the uniform. When we go and do off-site research I continue to wear my uniform. For me it is my armour. In my own life, in my own clothes I am much more vulnerable to peoples' barbed comments, but in the uniform it's fine. Also, it makes us clearly nurses which helps. Everybody know that you are a nurse. I don't need to be identified. Possibly I would have more authority if I was wearing civvies, but it also means I can get stuck in if I need to. I'm not sure it makes any difference to nursing staff."

In Zoe's role, she doesn't wear a uniform, but would like to. In her opinion, not wearing a uniform did result in some feelings of elitism and a lack of belonging to the nursing group. Subsequently, this led her to feeling separate from her clinical nursing colleagues. She also made the point that a uniform could lead to patients being confused about clinical care and research.

Zoe “I would like to wear a uniform, but it has to be distinguished from theirs so that patients know that it is not part of their care, to be involved in research. Personally I think it is unprofessional to be wearing something like this [pointing to what they were wearing]. In the [speciality] we are often dealing with bodily fluids, whether that is research or not research, we are. I think there is a sense of elitism about it and also, selfishly, I don’t like having to spend money on clothes. I do think that it would help relationships with clinical nurses.

G: Why is that?

I think just because that sense, when you see the nurses. Yeah, they are in a different uniform, but they are still in a uniform. It is a sense of solidarity, I think, and you dress like this the solidarity that we are expressing is, essentially, with the doctors and it is like we are seeing ourselves like the doctors rather than as nurses

I think there still is, yeah, because (1) we are not in uniform and that does distinguish us a lot. I mean EVERYONE...wears a uniform. So the doctors are not in their plain clothes, so if anyone walks in to the unit in their own clothes, then they stick out. We will do clinical care for one of our patients, or if we are walking past and someone shouts out, obviously we will do it, but we are not part of it. The clinical team all have a role that they are doing that day and we are not involved in it. So, we are separate to them.”

Related to this is how **visible** CRNs are to clinical nurses. This is a topic that many of the CRNs discussed. This was deemed to be very useful, as it helped to instil a feeling of teamwork. In particular, Tim expressed the importance of this.

Tim “I think it’s incredibly helpful. It means we can share our successes with the clinical team, so they feel like they have been part of them. It means that we know the team a lot better, because we are in the department; probably 2, 3, 4 of us throughout the day, constantly talking to the nurses and doctors about the patients that we are going in to, to check if they have any issues with us approaching them for abusive reasons or cognitive reasons. Checking eligibility with the team.”

“They quite often ask us to present at educational meetings. We get a lot of exposure in all of the inductions and meetings, things like that.”

“I think that [visibility] is one of the key reasons that we have been successful. It is again, because they see you every day that think you are part of the clinical care team and are used to us being around. Even if we are doing trials that aren’t recruiting highly, we will still be down there every day. It is absolutely key to our success.”

Peter “The research team is based in the [unit], but we have a more considered approach and have the luxury to take time to decide when the best time is to approach patients.”

“We are all together, all working within the same immediate vicinity; it breaks down a lot of barriers, you know that you get those hierarchies between disciplines emm its so, so that team feeling is very much there, because of the physical environment that we are in.”

“Even putting that all in place and giving them all that information and giving a full handover, sometimes then things won’t be done. That’s fine, that’s the reality of research in busy clinical environments in the NHS...Even with a good

relationship and them understanding what you are doing it doesn't necessarily always work. You can try a lot but something else can happen."

Katy "I suppose they see a senior nurse sitting in the staff room, they are just interested. Why are you there? To have the face of research. To keep us at the forefront of people's minds. If you are there, you can talk about what you do. If you are not, you can't."

Zoe recognised that there was particular value in this if it could be combined with research that the nurses saw as being relevant.

Zoe "We did a [specific type of trial] and that was SO nice because we were able to spend time with the nurses in [a part of the unit]. Because we were recruiting patients from [there] and for the nurses they were able to see an intervention that would make a very direct effect on their practice."

Conversely, a lack of visibility was seen as being negative as this absence of recognition made some feel like an outsider.

Janet "Because if you have a study that means that you are not in the unit very often, people can forget about you, or what you are doing, why you are there. So, when you come back again, you have re-establish that relationship."

Andy "It's not MY ward. Although it's a ward that I would get patients from, emm that's not where I'm based. Maybe it would be different if we had an office right on the ward, but because you are going down a flight of steps and along the corridor, you are physically going into a different environment."

Helen "Emm we are trying to raise our profile because this is a bit of a problem, that no one has any idea who we are. You know, it just says Research Nurse on my

badge, which means nothing to any of the areas that we are going to. I wonder if that means that, without that bit of clout, or at least being recognisable, I wonder if it is easier for clinical staff to dismiss you”

“I guess my aims are slightly separate to the care team and it does separate it. Also, and maybe this is the crux of it. You go in, and then you leave, those guys are there for 12 hours. You are a transient member of the team”

Some CRNs work in a unit that had implemented a standard operating procedure (SOP) that had been agreed by the unit management and the research and development office. This **policy** allowed CRNs to directly approach patients without, necessarily, having to approach the clinical staff first.

Peter “When I started working for the team an SOP had just been signed off by [identifier] just cementing the place of CRNs within the clinical team so we are very much seen as part of the clinical team in the [unit] and other specialities that we collaborate with and as mandated by protocols, so it’s not a case of us waiting to have permission to screen or approach patients, we are already seen as part of that clinical team, so we have that access to patients, and that is governance in place to say that is the case.”

“So, I think that in comparison to a lot of other areas, that access is often a big challenge to nurses, in the first instance to get access to patients. You know, not much in the clinical research facility, where the patients are booked in and are consented, but certainly in a clinical environment, it can be really challenging to get access to patients without being introduced by part of the clinical teams, emm, that was a barrier that was already removed, shortly before we started.”

“It felt necessary, really because of the points I’ve just highlighted. Being that outsider and having to rely on somebody else to say “Yeah, here are the patients I have been looking after overnight. You can see them and see whether they could be in your study”. Whether they would be suitable, depending on their eligibility. So, it got rid of that step and made the research nurse team, part of the clinical team and so that you are not so much hanging on the clinical team, who are already very busy, to do things for you, because what you are doing is very much part of the clinical care of a patient...”

However, in the absence of a positive research culture, two of the CRNs also disclosed that they employ *humour and/or a self-deprecating approach* to establish a relationship with clinical nurses. This could also be related to the personal perspective theme.

Andy “I think because I still had a lot of colleagues and friends who were doing those awful run of night shifts and they are telling me what their day has been like. I am thinking: “Compared to you, I’m just a pretend nurse”. You know. I’m not a pretend nurse. I AM a nurse. I don’t know if that was for their benefit to almost invalidating what you are doing. I am a nurse, so are you...”well I have had a much harder day than you” “what have you been doing today?” So, I always thought that as quite interesting. That was myself, referring to me.”

Helen “I am happy making a bit of a fool out of myself for a while, in it. I think helps when you first work in outreach, if you can, for me I can sort of play up to a bumbling research nurse. Like “This is your speciality. You tell me how this is going to work best” “I’m going to be here, I’m going to be a bit underfoot, I’m really sorry about that”. I can make a bit of a fool of myself, quite comfortably,

in that sense. I find that that can help to grease the wheels at the start, you know and it means that people will come to you and tell you what is wrong with what you are doing. Emm, it encourages people, rather than to bitch and moan between themselves to say “Look [name] that’s ridiculous, stop doing that” which is extremely useful.”

“I guess I’m giving the person I am talking to power. “You are the one who can tell me, please go ahead and tell me”. Which is tendency amongst research nurses anyway, because you need that person to do stuff for you”

“I think to get what you want, and I know that that’s an effective way of doing it. You know, the stick...well the stick doesn’t work. Especially on clinical nurses [laughs]. They have so many other sticks, controlling their working day that that’s not going to work. We can’t threaten our way into being successful research nurses, you’ve got to start by getting someone else’s confidence. Hopefully they will then help you to get what you need.”

These appear to indicate that some CRNs feel that the interface between research and clinical care is very closely aligned, whilst others feel like they need to use strategies such as self (or role) deprecation or self-denigrating humour to establish relationships with clinical nurses. Furthermore, many of the CRNs discussed how they used **public relations** (PR) or that they were ‘**selling**’ research to the clinical nurses. This appeared to demonstrate that the CRNs were aware that they were, to a certain extent, selling research and attempting to imbue positivity about research to their clinical nursing colleagues. Some of the CRNs, for example Andy, also related this to an understanding that clinical staff were busy and that they might not perceive research as having the highest priority.

Tina “I think good PR is the secret to being out there. Not antagonising people is important too. I think I kind of use it a lot in my strategy when I approach people, the clinical area.”

Zoe “I think, and a lot of people say this about research, that there is an element of being a salesman about it. That is not just for the patient. It is for the clinical staff as well. Emm, I think we are all working in teams and being able to communicate and develop teams really quickly is a really important element to working well.”

Andy “I think having a bit of PR, not being a nuisance, because we have all been ward based. So, you see someone coming along...” “What are you doing? Who are you?”.

“I can understand that, if you are dealing with all the challenges of bed shortages and staff shortages and our interest is recruitment and finding suitable patients. Emm, so I think it is that building rapport with staff, you’re dealing with. That little bit of PR and going forward, long term, you know we can all work nice together, instead of oh no, here he comes.”

Peter “We are sales people really [laugh]. We are good at going in and pitching. Why am I here, what do I need you to do? And that is really part of your skill set. It always makes me feel a bit uncomfortable to suggest that I am a salesperson, but really that is what you are doing.”

Helen “I’m quite good with the PR”

John reflected on this as an opportunity to promote himself, as a means to enthuse staff about the role and the research, whilst not being a ‘threat’ to them. Having to go through this saddened John though.

John “So we had to do a big bit of promoting the study on the ward and that this is really an important bit of work that we all need to work out what we are doing to get an answer. So, it became promotional and promoting yourself. You know, trying to enthuse people.”

“Just to make things work, to get people on board and be open and honest. It takes time to get the nurses on board, to promote it to them. You know, you are not a threat to them...It is sad, because these nurses should realise that everything they do should be based on research.”

John also identified above that research should underpin practice and that there can be a disconnect between these.

As Andy and Zoe indicated above, these efforts assisted in building a rapport with staff, usually as quickly as possible.

John “So I think we have got a really good rapport with the wards, but that just hasn’t come about on its own, it’s been worked at and yeah.”

Zoe “I think we are all working in teams and being able to communicate and develop teams really quickly is a really important element to working well.”

Another topic that many of the CRNs explored related to **dissemination** of previous research results. This can take a number of forms, from feedback after studies have been completed, to engagement with nurses as data is being collected (see previous section describing feedback from clinical nurses on short-term/relevant studies). However, regardless of the form, the aim was to increase awareness and appreciation of research.

Janet describes an ad hoc approach to this; albeit with positive results.

Janet “A few months ago I was at the nursing desk and one of them said “Oh, do you remember when we used to do this? Now we do it that way”. I was just passing but I said “Oh, that was because of the research we were involved in” “Oh, yeah right” So you are trying to find opportunities and show that this is relevant to what we are doing and this has actually changed our practice, but again it is very ad hoc.”

Tina explained that the research team put results onto the shared drive that the clinical team access, but that this process should be improved.

Tina “We have access to the shared drive, that the nurses use, so we post results about work. To be honest with you we haven’t been so good with that, because the team has been smaller and the workload has been so high. We have been talking about this in the team. This is one of the things that we want to do. To disseminate more results and everything. But we keep the clinical staff aware that this is this part of the share drive, that they can access results.”

Andy also indicated that publications that result from local studies are provided, but indicated that he wasn’t sure if these were read. He also made a link between dissemination and recruitment.

Andy “One of my colleagues is very good at sharing the publications that have come about from the studies we have been involved with. Emm so, whether anybody reads them, I don’t know. We have had chats over recent weeks where recruitment and how can we be seen a bit more. So, there has been a suggestion that we go to a meeting once a week, where the doctors get together, to tell them about research studies that we are recruiting for. That could be an option to share information, as well.”

John revealed that dissemination is problematic, due to shift patterns and the time that would be involved.

John “From studies that are [local], there always is feedback to the team, whether everybody gets it, it’s difficult, because if the shifts that people are on, because it is on one day. Even if they are working, it is difficult to release them and for the ones on nights, there is no way of getting them, so that feedback is quite difficult.”

In response to some of the difficulties, described above, Tim’s research team produces a regular written update that provides news about new studies, updates on existing studies, feedback/results from studies that have completed and also “stories” that describe the experiences of patients who have participated in studies in the unit. Tim also describes sharing success with clinical staff, which he views as a consequence of a positive research culture in his unit.

Tim “So, we have a [regular written update]. So, that tells them about any projects that are up and coming, if patients have taken part and they want to share their story they will be in there. Projects that have finished, things that are going well in projects, we use twitter and we have monthly educational meetings and if you have any results to share, we will share them there. So, people are always hearing what we are doing. We share that success with the department, because it is just as much their success as it is ours.”

However, Tim also expressed that the length of time that research takes to come to fruition can make this process more difficult.

Tim “That is what I see as being one of the biggest problems with research, in that you start a project in 2010 and publish in 2018. It’s maybe not even that relevant

anymore and when you are recruiting it was 5 years ago, so people have completely forgotten about it, so they never get results instantaneously, which I think can lead to interest to wander.”

Zoe also described the use of written updates and posters as a method of dissemination. Additionally, she identified that the research team had attempted to start a journal club for this purpose, but expressed disappointment that the doctors had taken the lead with this, thereby decreasing its potential relevance for the nursing staff.

Zoe “We have posters and [written updates] up. We are trying to do a journal club, but is it quite frustrating, because we are really keen that it involves the nurses, but now the doctors lead it and all of the journals are very, very medical [gives example], for God’s sake, I wouldn’t go to that [laughs] emm, so we are trying to engage the nurses.”

Zoe identified that clinical link nurses could be a useful way of disseminating study information to the clinical nurses.

Zoe “I think it was something that helped was having link nurses, like alcohol and dementia, in every one of the four teams that rotate across the day. So, we linked up the studies we were doing to the link nurses. One of them was really successful and the link nurse gave the presentation at handover at the beginning of the study. Which was REALLY effective, cos it was one of them standing up and talking about the study.”

CRNs also discussed how they provide educational sessions to staff in the units in which they work.

Tina “We did one [study] recently and all the staff in the ward were interested and want more information. So, I requested a video from the company and now we are thinking that we should do a presentation to the staff to tell them more about it.”

Tim “They can use us, if they want a bit more knowledge about audit or emm got research questions or education. They quite often ask us to present at educational meetings. We get a lot of exposure in all of the inductions and meetings, things like that.”

Andy used this as a way to inform staff about new studies.

Andy “Don’t give them a long-winded explanation about what it’s for. If they are interested, they will ask. When new studies are on the cards I tend to go round the wards to the nurses’ stations and say, look this is what is coming, we’ve got an electronic folder that we can share with the wards, where we put a little synopsis of the studies that we are doing, so that the staff who are interested can access that.”

Janet, Tim and Helen also used this as a strategy to inform nurses about the CRN role.

Janet “I suppose that is down to the research nurses. If you are genuinely interested in what you do, you will be more inclined to share that with others.”

Tim “So it’s about explaining why you need to get patients into trials like that, because this is their baseline data...But I think over the last few years, we have hopefully started to break down people’s understanding of what we are doing. They are more trusting of what we are doing and understand it more”

Helen “A chance to tell people what we are doing and why it’s a good job”

John used this as an opportunity to generally re-enforce the importance of evidence and how nurses could be more actively involved in this.

John “I think we are the ones that need to do it. We are the ones who are doing the research and being able to say “Look, we are doing this subject. This is really important. There must be things that you can see in you working day that you would like to improve, or maybe question. Whether it is research, or whether it is audit”. And getting people...though people are so busy, so it’s hard. It’s asking a lot.”

Super-ordinate theme two (Strategies and solutions) has explored strategies that have been employed by CRNs to engage with clinical nurses. One method for this was helping out, either solely to assist in patient care, or to do this as well as creating more positive feelings of research. Some CRNs described situations where they utilised a charm offensive or used other methods such as ingratiation, self-deprecation, sales/PR or humour to achieve these ends. Other CRNs also disclosed that they use rewards to engage positively with other nurses. The use of uniforms was also a key area of discussion, with varying views being expressed as to whether these may be positive or negative. This was also related to the importance of visibility to clinical nurses. Additionally, developing a positive research culture was also explored. Lastly, the importance of dissemination was discussed, both in terms of the benefits of this and the potential barriers to successfully disseminating information relating to future, present or completed studies.

The next super-ordinate theme will explore personal perspectives and implications for the clinical research nurses.

4.4 Super-ordinate theme 3: Personal perspectives

Many of the CRNs identified that a major attraction of their role was their **autonomy** (Zoe, Tina, Sarah, John, Andy and Katy). They indicated that this made it possible for them to effectively plan their day and allowed them to feel more ownership of the studies that they were contributing to. This did not seem to differ between University employed and NHS employed nurses. Though, University nurses did appear to perceive that they had more freedom.

Tina “You know for me I prefer my status as a University nurse. I am more free-style, I am not the sort of person who is in love with institutions and hierarchy and I love to work with my PI.”

Andy “Now, I prefer having more autonomy, although having learnt what I have done over the years has been invaluable to what I am doing now.”

Zoe “Which is one of the reasons I really like doing my job. Yeah, because our PI gives the studies, we make them work and I can’t make it happen without this happening, so they do it. They change it, or to make this study work, please do this. I’ll change it. So, they respect me as the person who is delivering their study and making it work.”

However, one CRN felt that this was resented by some of the clinical nurses; this particularly related to clinical nurse specialists.

Katy “It feels like there is a lot of resentment about the freedom I have in the job. Perhaps the autonomy. I am not micro managed, perhaps they feel they are.”

Whilst autonomy was seen as a positive aspect of the CRN role, a significant drop in salary from their clinical job, and general **job insecurity** were aspects that were seen,

by some, to be detrimental to recruiting and retaining CRNs. This is not directly related to relationships; however, many of the CRNs felt the need to identify this as an issue as it made them feel less secure in their role.

Janet “I think it is partly to encourage people into those jobs. I think I dropped £300 a month when I became a research nurse. If you couldn’t offer at least a band 6 you wouldn’t get people in the jobs...the length of the contracts too and fixed term contracts...I think it is quite an issue for research nursing. The last time we had a job, only 3 people applied. I understand that we always have work coming in, but for someone else, they would be reluctant to give up a permanent contract. Because there are no guarantees.”

Sarah “I have kind of been parachuted in and the reason for that being is that the funding for my previous job came to an end. I think that is one of the risks of being in research is that there is always that risk that there might not be money to keep you employed, but I think it was a recognition that I do have some skills and that they want these within the clinic.”

“By the time someone has worked for a couple of years once they have qualified, they are doing 12.5 hours shifts, they have got 4 days off a week, they’ve got their unsocial hours pay, they’ve got a permanent contract. Where is the motivation to give all that up, to take a one-year contract on less pay Monday to Friday?”

“You know Gordon, people have mortgages they have families they have... the thought of giving up a permanent contract, for a year. It’s very tough.”

Katy “I guess that links to income generation...we know that with one study we need to recruit 15 subject to generate one-year salary surplus, but you are always on

tenterhooks. Achieving that gives some recognition, between the two of us anyway.

G: How does the link between recruitment and income make you feel?

It's essential, but kind of scary. Recently we had a scare we had a project that was due to start last February, with three years' salary so it hasn't started and our salary pot is low because of that. Because there is less that is required in our account, I thought I was going to lose my colleague, so we have had to creatively plan the next two years in order for R&D to cover the salary. So that is reliant on us meeting our targets quite heavily but our PI has changed and he's not as research active and he needs a bit of guidance.

I'll never be out a job; I know that much myself. I would be re-deployed and my career would move in a different direction. I'd rather stay in this job. I like this job. I think it is worthwhile. You know, you achieve something today for tomorrow – absolutely. But, it is always at the back of your mind especially now that I have someone working with me and that's a worry, especially when you are picking new projects.”

Partly as a consequence of this, one of the CRNs indicated that recruitment has become more problematic.

Sarah “I mean in the [name of unit], the last advert that went out, they didn't get **any** applications.”

Some of the CRNs expressed that there was a moral obligation to offer research to patients.

John “we have to give a choice and choice is really important. Emm, and taking it away isn’t right”

Sarah “So, it is interesting the way that some of the, you know, when somebody says “That patient is far too anxious to be in a study...blah, blah blah” and actually, when you get to know the person, you can...yeah...you make your own opinion of how the patients are and what is causing their anxiety and how the present and what you can do to help that. Or some people are just anxious.”

“they [other nurses] are very protective to you not having access to them [patients] but actually in not allowing access it is detrimental.”

For Peter, the philosophy in his unit meant that this was not an issue.

Peter “The ethos of the department, and group, is that patients have a right to be offered opportunities to be involved in research and they can say yes, or no, but they have the right to have that opportunity. So, it is not someone else’s place to decide that they are not going to let the research team to be involved.”

Additionally, once a patient, or relative, had given **consent** to participate in research, this appeared to add further weight to the **imperative** or obligation for the research to continue.

Janet “Well, there may be safety issues by discontinuing a trial and you have to bear in mind that the patient, or their relatives have consented for them to be in the trial so you have to follow the protocol. Sometimes you do need to muscle in. You just have to get in and do it. Wherever possible you have to follow through with the study. Otherwise you are not respecting the wishes of the person who gave consent, to have that opportunity. You to just put the armour on [laugh].”

Helen “They could make it very difficult. So, we had to get to the notes and we needed to see the patient, who was going off to surgery. If you really want to, you can keep people away from those things emm, there was a bit of that. I was “You know, I really need to see that and they have consented, I really do need to get that information.”.”

Helen, in particular, appeared to have considered how her *nursing philosophy* had altered since she had been a clinical nurse herself.

Helen “It does [say something about the value of research], I certainly wouldn’t have spoken about my care for my [clinical] patients in those terms, because I had a very serious view on that. Now I have a very serious view on research. I am very dedicated. But I do couch them in different terms. If I needed to go to another area or when I have a [clinical] patient.”

Three of the CRNs also discussed their perception that clinical nurses feel that the CRN role is easy, especially compared to the clinical nurses’ responsibilities.

Tina “I think they think that we are not really busy and we don’t do much, or we don’t have the stress they have. We don’t have the stress they have, but we have a different stress or workload to manage. We happen to do extra hours or to do unsocial hours, to come at 2, 3, 4 in the morning to do blood tests. Even though we have an office job, but I don’t stick to my office hours. I do extra”

“I think they think our job is easier and that we are not real nurses, or not sure of the impact that we make on the day-to-day care of patients.”

Katy “It is perceived as an easy job; I don’t think it is an easy job.”

“I never told anyone when I got my band 7, but when someone else told them the response was: “Why did she get that? What does she do?” emm and I told one of my peers and she passed it onto the team and things changed. Conversations were shorter. Less interaction time. You just get a feeling.”

Janet “I think it’s the perception of the job. It’s like “What are you doing here at 8pm when you sit in an office all day?” [laugh] People do have that perception.”

This may go some way to explaining a perceived lack of **value** in the CRN role. Furthermore, many of the CRNs indicated that clinical nurses did not see CRNs as being ‘real’ nurses, or even nurses at all, something that most of the CRNs disputed.

Tina “I think they think our job is easier and that we are not real nurses, or not sure of the impact that we make on the day-to-day care of patients...It’s ridiculous. We ARE real nurses and we have a daily impact on patient care. We see patients every day when we do follow up for patients. If we see someone for follow-up we don’t just see them for research. If there is something else, we escalate it. We had to admit patients after seeing them in a post study follow up and we have direct contact with patients. So, our clinical skills are here with us every day, every minute. We are using them. We are not just using our research skills. We are dealing with patients and sometimes we go beyond our research skills. Sometimes our clinical skills come first.”

Janet “You know someone who had been on sick leave and they came back and was doing some admin duties and they had been observing practice. I had obviously been doing something and they said “[Name], what do I put you down as?” but they genuinely didn’t know if they should put me down as a nurse or an AHP, or... and I like “What! I am a nurse. I am registered!”. So, yeah, I think there is

a lack of understanding of what us research nurses actually are. That can be difficult”

Sarah “I’m coming in as a senior nurse and I know that there has been some unrest about that, you know. “Here is that blue eyed girl. What’s she got that I haven’t?” and that has probably been one of the things that...I think as a senior nurse you are aware of that.”

Helen “I think we are worried how we are perceived as research nurses as not a ‘proper’ nursing job.”

Zoe “However, outside of work, when I talked to other nurses and physios, there was a definite attitude that I was turning my back on the profession. That I was somehow too posh to wash..., about being elitist...there was this feeling that I was turning my back on being a nurse and, yeah, what was wrong with just helping people, being a nurse, washing a patient, being in a ward. What was wrong with that?”

Katy “Because it shows that you are still a real nurse. Which is often the perception that because you are not beside the bedside you perhaps don’t have a real nursing job.

G: Is that a common perception?

Absolutely, yeah [pause]

G: Why do you think that is?

It’s the traditional view of nursing. It’s by the bedside with a patient in the ward environment.”

Zoe, did not have much clinical experience and appeared to feel this criticism most keenly; indeed, she appeared to harbour some of these feelings about herself.

Janet also noted that the job title may be of significance in this:

Janet “I think the job titles don’t help sometimes. We used to be called research coordinators. I always called myself a clinical research nurse. I think the reason for that title was that research coordinator suggests that your role is a bit broader. You may be involved in the liaison and setting up of studies, or doing the [study approval] forms or may be...I don’t know, but I definitely prefer the title Clinical Research Nurse.”

Andy, Sarah, Katy and Zoe also indicated that this lack of **value** may be related to a perceived lack of expertise in the speciality, regardless of how expert they are in the field of research. These feelings also led Andy to have feelings that he was a fraud. This may also link with feelings/perception of being a ‘real’ nurse.

Andy “I’ve had to do a lot of background reading about different medication, disease processes. Just so that I can be better in informing my patients and also when I am speaking to clinical colleagues, on the wards. So I’m not sounding like a fraud, you know that there’s that respect that I’m talking about, it’s still a work in progress, because it’s huge topic, but yeah, every day is a school day.”

The participants also alluded to the **perception** that CRNs move in and out of wards without being aware of what is happening there.

Sarah “I kind of arrived and no-body knew...” “Who is this person?” and “What is her role?”, “what are her responsibilities?”. “She just seems to be swanning about, not doing very much”. Emm...and that has been difficult.”

Andy “You are not just coming in with, dare I say it, the clipboard. You know, writing down numbers and swanning off again, but I think there are some people, maybe that is the view they do have of clinical research nurses.”

“G: You used the term earlier “Swanning”...

YES, and that is not MY perception...I live it, I do it, I know what we do. Emm but I think when you see people come in and off the ward and you may be don't see them do a great deal. So, trying to look at it from someone else's perspective.”

Zoe “what did she think of me coming into this ward? Not in my uniform emm, you know waltzing in, as she saw it”

Interestingly though, one of the CRNs also said that they did not feel like a ‘real’ nurse themselves.

Andy “But having the experience of, dare I say it, real nursing. Because when I first moved into research, it was like “What do you do?” [laugh] I used to refer to myself as a pretend nurse...I think because I still had a lot of colleagues and friends who were doing those awful run of night shifts and they are telling me what their day has been like. I am thinking: “Compared to you, I'm just a pretend nurse”.”

A revealing insight into the CRNs ***personal perspectives on their role*** came in the form of the metaphors that they used to describe their role (see Appendix 9). All but one of the CRNs divulged these. The CRNs also reflected on their interpretation of the metaphors. They ranged from the optimistic (Florence Nightingale's lamp – lighting the way, bird – taking others with them and swan – boosting the confidence of others) to practical (cuttlefish - to alternate between invisible and conspicuous, detective – to

solve the puzzle, dog – eager to please, Chimpanzee – intelligent and resourceful, clipboard - denoting their work and Octopus – able to multitask) and also predatory (Snake – being sneaky to achieve objectives or a spider – to catch their prey). These will be explored further in the discussion chapter.

Super-ordinate theme three (Personal perspectives/implications) has explored personal perspectives that resonated for some of the CRNs. These included the importance of autonomy/trust in their role, financial/contractual implications of becoming a CRN, and the consequences that this has on recruitment. Linking subject recruitment to trials with provision of on-going CRN contracts was also raised. Some of the CRNs reflected that there was a moral obligation to offer research to patients, ensuring that patients had the right to make an autonomous decision whether to participate.

In the final super-ordinate theme external factors that have implications on the CRNs ability to build relationships will be explored.

4.5 Super-ordinate theme 4 - External factors

The final super-ordinate theme relates to external factors that influence the CRNs practice and relationships.

Some of the CRNs identified that the **culture** of the clinical area was important.

Peter "I feel very lucky to work here. I know it shouldn't feel like a luxury, but it does. I have walked into an environment where there is a positive culture."

"Yeah, it is very much the culture, and is very much a strong part of the culture, even before I started; yeah now, now it is even more embedded. Perhaps that is because I have worked there for so long, obviously that's got a difference, but I think that level of engagement between the clinical and research team has got deeper and deeper as time has gone on."

Sarah "It's a lot to do with the team you are working in. A lot of the team I worked with were medical researchers. So, research, for them, is like breathing. And that culture, it disseminates down, em, emm, and I think that you can see that."

However, some also explored aspects that were not so positive.

John "Whether nurse training is changing over time, but I do think there is still a bit of, this is the way we do it, and that's it. Which isn't very good, but with the whole...I don't know some nurses they get promoted and they just want to be dominant. It is their ward, they will have it done their way, and I think that is because they have been managed that way. It is not always about what you read in research, it's because that was how you were treated, so that's how you will treat everybody else...part of it is their training, because of their experience on the ward. I think this maternal, or dominant management style that the NHS

has got, it's err, "This is what we do". It's not questioning, or encouraged to question. They just want to get to the end of the shift."

Sarah "[In the NHS] it's much more insidious, because people are suspicious and people are overworked and, yeah, it's like what we were talking about earlier about the NHS culture of everyone is swinging the lead, until it's proven that they are not."

Katy "The problem is that research isn't always high on their agenda. It is just to keep the momentum going. Everyone is busy, and their priority is clinical - mine is research. However, you don't see anywhere that the NHS is a research active organisation. It's not on their homepage. You know, it's not anywhere. If that doesn't come from a corporate level; it's never going to filter down to individual departments."

Additionally, some of the cultural issues appeared to relate to the ***social etiquette*** in the unit. Some of the CRNs were more aware of this.

Janet "I don't think that culture is there in other areas. We had a research nurse from another area, that came up to recruit a patient in the unit and I guess the culture in their area was that it is open, free for all, on you go, recruit who you want and there was a bit of conflict."

However, Janet later somewhat contradicted herself, as she took a more strategic approach. This may have been by-passing qualified nurses to engage with students instead.

Janet "I quite often make a B-line for student nurses actually, if they are sitting at the nurses' station. I'll ask the nurse if it's OK to go and see Jo Bloggs and I'll quite often leave an information sheet with the student nurse. Cos I know they

probably have a wee bit more time to read over it, digest it. So, they are quite interested in it. They are not pre-occupied with the next drug round or the patient going to theatre.”

Janet “Knowing when not to get in the way. I think some of that comes from knowing the speciality that you are working in. We have all worked in this area, so we know when is a good time to be going into that space, or not. I guess that could be quite difficult for a CRF nurse to read, having never worked in that environment and coming in...SO, I guess that there are probably quite a lot of subtle things that you are probably not aware of, that you know from your experience in that area.”

Andy related this to a courtesy that he was paying to staff.

Andy “If there is someone there I would tend to go to speak to one of the nursing staff. I don’t know if that is because I’m thinking it’s courtesy, this is their bay.”

Whilst Helen indicated that she deliberately involved the nurses, even if it not necessary. This was done to include them and to build up good favour.

Helen “Certainly in out-patients I go and ask them who is coming in. These are the guys on my list can you help me find them. Now I know how to do that. I’ve been out so often that I know how the lists work. I know how they are doing it, but it really important that you involve them, and use their skills. I mean it is easier, of course it is easier. Of course there have been times when I have not done that, because they would just find it annoying, but I don’t think that is particularly respectful of their job nor does it create a very good feeling for the team who work in there”

Andy also described a similar situation.

Andy “When patients come in to our research clinic, they are not here for any clinical care, so the only time we would need to interact with the nurses would be if we needed to borrow the ECG machine. I know where it is, but I will always ask for it and “Do you mind if I borrow it?” Just to keep that relationship of positivity.”

This could also relate to gate-keeping and the culture of the unit in which Andy works.

Related to potential issues with understanding the culture/etiquette in the clinical areas, another related sub-ordinate theme identified that ***CRNs working in Clinical Research Facilities (CRFs)*** do not have as much autonomy as non-CRF CRNs. Subsequently, they did not have as much ownership of the studies they are working on, nor did they have the same level of understanding that speciality-based CRNs had.

Katy “I think if you were just given the study, using the example of the clinical research facility, where they don’t have real ownership of the studies they manage them based on the patients they are given. I don’t think they would really feel the same way about that. Certainly speaking to some of them down there, that is something they want. They don’t have ownership of their studies, because they are tasked to do studies.”

John “I do think it is very difficult for CRF nurses to be positive about their work, because it is so, this is the way that you do it. Maybe there aren’t so much: “There is the study, go on and do it”. They aren’t given as much ownership and autonomy. But it is because they are in this fixed box, where they have to follow so many processes and procedures and deadlines. They are so restricted.”

However, Andy, who had previously worked in a CRF suggested that this was a useful environment to learn about research. Though, he did indicate that he appreciated the autonomy in his current role.

Andy “So, the foundation that I have from my previous job, though regimented, has helped to put me in good stead and I have used those skills and brought them into my current role”

“I think there is a lot of support in a large unit, like the CRF, there is the support, lots of opportunity for variety, for training. I think being stand alone, there is more autonomy.”

“I would have been gifted a nice study in a folder and an SSI forms and things had already been done. It was just a case of get on with it. You know, liaise it and get on with it.”

Some CRNs also highlighted potential difficulties that CRF CRNs could face, due to their lack of recognition in the speciality or the clinical area that they are going into.

Andy “not to downplay my previous role but, going from being a data collector, or someone who prepared drugs, to having to have meaningful conversations with patients and seeing people who have maybe just had [an acute event] 6 hours ago and have big life questions. Emm, somebody who has been in [this speciality] for however many years and has dealt with that kind of patient before and that group knows...give yourself X amount of time to come to terms with things and this is the normal process that you'll, you know, hear from this rehab team... whereas for me it was...research...I had come into the team having the experience in research, but not in [the speciality].”

Helen “Emm we are trying to raise our profile because this is a bit of a problem, that no one has any idea who we are. You know, it just says Research Nurse on my badge, which means nothing to any of the areas that we are going to. I wonder if that means that, without that bit of clout, or at least being recognisable, I

wonder if it is easier for clinical staff to dismiss you and yeah, it is a bit more specific to [CRF nurses], so venturing out of it could, immediately make you uncomfortable. Because we are not known elsewhere.”

John Identified that he felt that it must be difficult for CRNs from the CRF, both in terms of a lack of speciality knowledge and because they have less autonomy/ownership, but he also highlighted that the CRF is an excellent place to learn about research.

John “The CRF nurses have to go in there and you can see them struggling...and I think “I’m glad I’m not you”. Trying to operate these studies in this [Speciality] . Because they don’t really get the freedom to be able to promote the study as well. They are there to recruit. They don’t do much promotion and enthusiasm for the nurses... You know, as the 3rd person there they don’t seem to be that much embedded...I think it’s really difficult for them.”

“But we love the CRF trained nurses in our team. Cos they train them and they look for something else”

Another factor that Janet reflected upon was how the **acronyms** that are used in studies can exclude staff, because often it isn’t immediately apparent what the study relates to. The acronym cited below has been changed to ensure that it cannot be associated with Janet.

Janet: “I think it can be difficult for them to keep up to speed with what we are doing, because as I said we have several projects running at any one time; and they all have these short titles that don’t really tell you what the studies re about. So, as research nurses we will call it, I don’t know the PLATEPUS study. What does that actually mean?”

Some of the CRNs identified ***under graduate nursing programmes*** as being potential root of the difficulties that they were facing.

John “No, you know when you were doing research at Uni, you had to critique two articles and you could choose the two articles, but because I was always moving around I never really got a passion for any one particular area. I don’t know if I was missing something, but it was only when I got into my clinical practice that...doing the same thing for seven years, that I thought, hey this is a process, we need to improve the process and you realise the scope there is for research. The need. It wasn’t really until then that I fully understood it.”

Peter “I think nurses generally see research as quite a dry area and not their most happiest memories of their training, and often something that they don’t always see the relevance of, certainly in a dynamic kind of way. So, when we meet with new starts we try to impress on them the very dynamic nature of the work we do here.”

Zoe also discussed the difficulties that she faced because of the focus of research in under graduate programmes. Additionally, she suggested that a change in emphasis in Universities could have positive benefits.

Zoe “you just got to wonder that in our undergraduate training we are taught a lot about research, but not the process of research and actual appreciate that it is nurses that get those figures that you put into tables that you are reading. Or dissatisfaction with their jobs and feeling underappreciated or not in the know, so when any patient is in a research project they feel cross because they haven’t been involved in that process. I don’t know, but because it happens so

often and consistently you do have to wonder, what is lacking that the staff nurses don't appreciate it?"

"I think targeting undergraduates is really important. I don't even know if it is practical, or possible, for them all to have a research experience. There are so many of them, but just to install that research is active, it is not just a paper, not just a methodology. It is actually a person's job that, because I did not know that, and I think that a lot of people don't."

This was particularly evident with Tim, who indicated that he chose one of his nursing courses based on the fact that research was not a topic.

Tim "Interestingly I went to a different university to complete my degree after doing a diploma, cos it didn't have a research module, because I found it so dry and boring at university. I had no idea how data could be collected, or how trials are conducted. It is all about critiquing what had been done, but I had no idea how they done it. So, I understand that people don't know what the role is."

Though, later Tim explains that it can be more difficult to engage with nurses in a dialogue about research because they do not complete a research project in their programmes.

Tim "They don't have to do it as part of their training, so it is also another reason why it is good to keep a good relationship with the team."

He also discussed the benefits of student nurses working with the research team as an additional learning experience on their placement.

Tim “We also have undergraduate nursing students come to us, for at least 1-2 days of their placement. So, they know what is going on and encourage them to be excited about research.”

Super-ordinate theme four (external factors) has explored the importance of the culture in the clinical area and how an appreciation of the etiquette is significant if the CRN does not wish to upset the routine in the areas that they are working in. The specific implications for CRNs who work in a centralised research unit was also identified by nurses who based in this type of environment, and by others, who did not. Additionally, from Janet’s perspective, the use of acronyms for studies can have the effect of excluding clinical staff from an understanding of what a researcher is studying. Lastly, the importance of engaging positively with student nurses was seen by some to be key to building positive perceptions of research into the future.

4.6 Summary of findings

The process of data analysis resulted in four super-ordinate themes emerging.

Relationships, rapport or resistance explored the complex nature of the interactions between clinical nurses and CRNs. It identified both positive and more negative aspects of this and what the CRNs understood by this. **Strategies for engagement** introduced the methods that CRNs have employed to build positive relationships with clinical nurses, and whether they think that these were successful. **Personal perspectives** focused on the individual philosophies that the CRNs hold and how CRNs view their role. Finally, **External factors** presented the CRNs understanding of how culture, where a CRN is based and undergraduate nursing education impact on the interactions of the CRN.

The inter-relationship of the emergent patterns and sub-ordinate themes can be seen in appendix 5.

All four themes identify important contributing factors to the development and maintenance of the relationship between the CRN and their clinical nursing colleagues. The next chapter will critically analyse these findings in relation to the wider literature and the research question.

Chapter five – Discussion

5.0 Introduction

This study set out to gain a deeper understanding of how CRNs make sense of their relationship with clinical nursing colleagues. It sought to understand the positive and negative factors that contribute to this, and gain a more in-depth appreciation of how the CRNs understood this process.

This chapter will explore the results, related to the research question and the wider literature. It will also consider the theoretical frameworks explored in chapter two.

To this end the research questions for this study were:

How do CRNs make sense of their relationship with clinical nurses?

Sub-questions were:

- a. What are the experiences of CRNs in their relationships with clinical nurses?*
- b. What contributes to the establishment and maintenance of these?*

From this four super-ordinate themes emerged (see table 4):

1. Relationships, rapport and resistance
2. Strategies for engagement
3. Personal perspectives
4. External factors

These will be used as a structure to explore the contextualised findings from the study. As with the previous chapter, there is interconnection between some of the findings. However, this demonstrates the complex nature of this process and the non-linear experiences/solutions that the CRNs discussed. To illustrate this, a

concept map has been generated to demonstrate the links between the findings (see appendix 10).

5.1 Super-ordinate theme one: Relationships, rapport and resistance

There was universal agreement amongst all of the participants that clinical care should take precedence over research, though they also suggested that the two could co-exist. There was also empathy with clinical staff, with widespread acknowledgement that clinical nurses were under a great deal of pressure and that this could have implications for their capacity to undertake additional duties, such as research. Stobbart (2012) described that this empathy is borne from the CRNs previous clinical experience and understanding of the pressures of the role. In this study, two of the participants had minimal clinical experience. Though only Zoe disclosed that this had been an impediment in establishing relationships. This reflects Benner's (1984) work on knowledge and skill acquisition, as a novice CRN may need more support from senior (expert) colleagues. Whilst clinical care taking precedence is not explicit within the literature, it aligns with the principles of beneficence and non-maleficence as a key tenet of ethical research practice (Beauchamp and Childress 2009).

Sarah and Zoe highlighted that the boundaries between research and clinical care can be blurred when research provides an intervention for patients who have no other treatment options. There was also some discussion regarding whether wearing a uniform could lead a patient to think that research is a treatment. In these situations, the researcher should be guarded against the patient developing a therapeutic misconception, whereby there is an assumption that the research is eliciting a therapeutic benefit. In many situations, this may not be the case, especially in placebo controlled trials (Appelbaum, Roth and Lidz 1982). It also potentially challenges an

underlying principle of clinical trials, that there should be an equipoise between the understanding of the benefits of existing treatments and whether new interventions may be superior (Cook and Sheets 2011). In the context of building relationships, Sarah noted that offering research when no other treatment options were available actively assisted in confirming the value of research, and her role. This was especially important with the clinical nurse specialists with whom she worked, as they were a group that she found it particularly difficult to develop positive relationships.

Conversely, there were many occasions when the CRNs explored situations where clinical nurses were perceived to be less supportive, or resistant to research. Largely this did not appear to be anything more than inconvenient, but there were notable occasions where this proved to be stressful for some of the CRNs. Janet reflected upon a situation where a door was slammed in her face when she was trying to see a patient. She used humour to describe this, but also commented on the anxiety that it caused. This literal use of what can be a metaphor for someone blocking access to something could be important as it demonstrates the level of the resistance that can be encountered. Three of the CRNs also discussed the perception that research can be detrimental to patients. Sarah suggested that CRNs had to earn the trust of clinical nurses, to reassure them that they were not going to harm patients. Whilst Helen disclosed that she was very anxious that one of her studies could have led to patients' surgery being delayed. This caused resistance from the clinical nurses, making things 'very difficult' for Helen to conduct the study. Lastly, Zoe spoke at length about an incident where a clinical nurse had inferred that the research study that she was working on was harming patients. To Zoe this equated to an accusation that she was harming the patients herself; something that she completely refuted and caused her to be upset and angry. Consequently, she discussed how some nurses were 'black-

listed' as being uncooperative or obstructive. This has not been previously identified in the literature, though some studies have concluded that clinical nurses are resistant to research and that this may cause difficulties for CRNs (Eastwood et al 2012, Houlston 2012, Kunhunny and Salmon 2017). The first published reference to blacklisting originates from 1774 when American miners when on strike and were subsequently ostracised (Weir 2013). The fact that it has been applied in these circumstances may either indicate the strength of feeling that the CRN had on this issue, or that she was using this in a humorous way to cope with the stress it caused. This study demonstrates the clearest indication that clinical nurses may consider that research is harming patients, it is also the first time that the concept of black-listing has been explored.

Stobbart (2012) identified that a cautious approach to research might be related to injurious misconception, resulting from patients or proxies assigning uninformed risk to research (Snowden et al 2007). Consequently, if clinical nurses have concerns that research is harming patients, then this may explain some of the more negative attitudes towards CRNs. It is true that most clinical trials carry an element of risk; however, these are usually minor, closely monitored and weighed against potential benefits (Grady 2006). A notable example is the Parexel study at Northwick Park hospital, where six healthy volunteers became extremely unwell after infusion of a novel drug (Vince 2006). Nonetheless, these are extremely rare, and it may be that the perception of harm is greater than the actual risk of it occurring. However, it was independently raised by three of the CRNs, indicating that it is a consideration. This observation may indicate that clinical nurses do not have a full understanding of the approval processes that clinical research projects must satisfy prior to commencement. It may also reflect the observation, described by Katy and Zoe, that

clinical research is perceived to be inextricably linked to the profits that drug companies make, rather than solely improving patient care. These examples could either be isolated incidents, or an indication of an underlying concern about the safety of research. They also only explore the CRNs perspective, which is a limitation of this study. The perspective of clinical nurses should also be examined to provide a more balanced understanding of this topic. This phenomenon should be studied further to gain a deeper understanding of the contributing factors to these perceptions.

The result of this negativity from some clinical nurses, led Helen and Zoe to indicate that they purposefully avoided nurses whom they perceived to be more negative or obstructive to research. Others (Janet, Sarah, Tina, Helen, Katy and Tim) did not describe using this approach, but admitted that the additional time needed to work with challenging nurses made their job more difficult. There was no indication that these nurses were exclusively negative towards research, and some of the CRNs thought that this was because the nurses were stressed, but the need to circumvent members of staff did mean that research was more complicated than it might have been, thereby adding to the workload of the CRNs involved. This has been alluded to in the literature (Spilsbury et al 2007, Kunhunny and Salmon 2017), but requires further exploration to establish if it is a recurring phenomenon and, if so, for strategies to be developed to prevent this from occurring.

Janet also suggested that some job titles may contribute to a misunderstanding of the role. She reflected on the fact that in her previous job she was a clinical research coordinator (CRC). She was given this job title as her role also encompassed the management of a number of clinical trials. However, she felt that this detracted from the perception that she was still in a nursing role, often being at pains to explain to

clinical nurses that she was a nurse, despite her title. Reflecting this, her job title has now reverted back to CRN. Problems with a proliferation of job titles in nursing have been noted in the literature (Lowe et al 2012), leading to a lack of understanding of roles (Teare et al 2016). This may be particularly significant in the USA where it is not uncommon for those in a CRN role to have a job title of CRC. However, there is also a growing trend for non-clinical CRCs, as they are less expensive to be employed (Jones, Hastings and Wilson 2015). Lindquist et al (2011) undertook a time/motion analysis and found that CRN spend a third of their time communicating with staff or patients. Whilst, data collected by University Hospitals Coventry and Warwickshire between 2015 and 2017 indicates that CRNs spend a quarter of their time on direct care (including data collection, communication, recruitment and other nursing procedures) and a large proportion of their time on organisational or administrative duties, whereas, research assistant practitioners spent three quarters of their time on this direct care and much less on administrative duties. This may indicate that both groups fulfil different functions (Aldridge 2018). However, this trend necessitates a re-examination of the nursing aspects of this position and any potential added value that there might be in having a nurse in this role (Jones, Hastings and Wilson 2015). As financial constraints continue to impact on the healthcare sector, this should be addressed by the CRN community, as a matter of urgency, to ensure that patient safety is not compromised. Locally, and internationally, consideration should also be given to the job titles in research, as these may cause confusion as to the qualifications that staff hold and roles that they undertake.

The majority of the CRNs reported that clinical nurses were largely positive about research. This was especially the case in environments where research was more embedded in the culture and resulted in well established relationships between clinical

and research nurses. The two main reasons for this positivity appeared to be related to the medical leadership in the unit, promoting research as a vehicle to improve patient care and research support being formalised by way of unit-wide policies and procedures. These were put into practice with a standard operating procedure (SOP¹) which embedded research into everyday practice. This unit also utilised a wider repertoire of methods to disseminate information relating to on-going and completed studies. All these methods assisted in facilitating a largely positive environment, albeit with some difficulties with nurses who appeared to perceive research less favourably. What is not clear is whether these nurses were particularly negative regarding research, or whether they were negative about other aspects of their role too. Peter made a comment that may have alluded to this when he stated that he knew which individuals in the unit would be difficult, even before he moved in to a CRN role.

Four participants (Tina, Peter, Helen and Zoe) reported that studies that were shorter term and/or were more relevant to nursing practice were beneficial in engaging with clinical nurses. Conversely, it appeared that there was a somewhat of a disconnect between some of the longer term studies or others which had a purely medical outcome. There have been studies that have previously found that CRNs need to gain the co-operation of clinical staff (Houlston 2012, Smith et al 2015, Tillet 2015), but utilising short-term or nursing studies as a specific method to do so has not been identified. It could be that this a partial solution to increasing positivity related to research, but the research itself would need to have value to be conducted in the first instance. Nonetheless, efforts to ensure that the more practical, or immediate, aspects of the research are apparent may prove beneficial to the CRN.

¹ The SOP alluded to by Peter, was not seen by the researcher. The description of the scope and content of this is based on information from Peter's interview.

There was also an observation that CRNs were perceived to 'swan' or 'waltz' into clinical areas to collect research data and continue in the same manner when exiting the unit. The CRNs indicated that the use of these metaphors implies that they do not concern themselves with clinical care. Three of the CRNs (Sarah, Andy and Zoe) confirmed this perception. However, interestingly, Tim chose a swan as a metaphor to describe clinical research nursing as it conveyed serenity, whilst paddling underneath the water. He also attributed this to making people feel important. It is difficult to reconcile the contradictory positions of these two perceptions, but they may reflect a broader opinion on the way that clinical nurses view CRNs, and also how they view themselves. This has not been comprehensively explored in the literature, but some authors (for example, Kunhunny and Salmon 2017) allude to it, referring to the perception that CRNs are supernumerary or clipboard nurses. Additionally, Houlston (2012) reported that CRNs were viewed as being elitist and distant, a perspective confirmed by Zoe in this study. In this study, Zoe chose a clipboard as a metaphor for the CRN, adding that she chose this because CRNs were "always seen with them".

The unofficial role of gatekeeping, held by clinical nurses, was explored as being an important issue for the CRNs to gain access to patients. The exact reason why clinical nurses took on this role was not clear in this study, though Zoe and Katy indicated that it was in an attempt to 'protect' the patients. This appeared to be framed as part of an advocacy role of the nurses (Nursing and Midwifery Council 2015).

The gatekeeping role was appreciated by some of the CRNs (for example Andy or Janet discussed aspects of this) as it provided intelligence into the best moment to speak to the patient, or if the patient had been anxious since an initial approach by a member of the research team. Conversely, and far more frequently, many of the CRNs (Zoe, Tim, John, Janet, Peter and Sarah) described more negative aspects to a

gatekeepers' role; where the clinical nurses gave negative reasons for not approaching a patient. In these cases, the CRNs often reflected on the patient's right to consider a potential study. None of the CRNs explicitly mentioned autonomy, but their opinion appeared to be grounded in the ethical principle that autonomous individuals should have the right to make decisions regarding whether they would like to participate in research (Beauchamp and Childress 2009). Their experiences seemed to reflect that another group paternalistically decided whether patients should, or should not be allowed to make these decisions. This perhaps reflects the social infrastructure in healthcare settings and the 'power' dynamics that are perpetuated therein. Collyer, Willis and Lewis (2017) described the conflict that occurs in hospitals as different groups of individuals vie, based on the basis of cultural capital. This would appear to be present in some of the experiences of the CRNs. Additionally, two of the CRNs (Zoe and Helen) identified that the power dynamic is completely reversed in research; with patients holding more power as they can demonstrably agree or disagree to participate (and withdraw at any point), much more explicitly than is the case in standard care provision. It may be that this reversal of dynamics make some nurses feel uneasy. However, this is clearly an assumptive deduction, and would require more robust research-based evidence in this area for it to be postulated as a concrete phenomenon. It may also be the case that the clinical nurses felt that the patients were too vulnerable or unwell to participate in clinical research. This should be explored in future research.

Stobart (2012) described a similar situation of gatekeeping, but framed it as an internal debate that the CRNs had themselves, considering eligibility verses suitability. This was something that the CRNs encountered in this study, as they used their experience to decide whether a patient should be approached. This leads to a question

of whether gatekeeping, in this context, is ever acceptable. Any research that is offered to patients will have been approved by an ethics committee, so it is suggested that any attempt to circumvent this approval, could be unethical. However, as indicated above, one must wonder if it is ethically acceptable to approach someone if, for example, they are upset. It may be that they are upset about something that actually makes them eligible for a study (for example a new diagnosis) and therefore that should be inadmissible. However, Zoe did reveal that she found it difficult to approach relatives of a deceased patient for an observational study; acknowledging that she did not know if this reticence was for the relative's benefit, or her own. She was thereby acting as an internal gatekeeper. Larkin et al (2017) also describe an internal gatekeeping role for the CRNs, especially when patients were ill or stressed. This may be important; however, the evidence for this remains scarce and is worthy of further exploration.

In this study there was a divide in the view of the clinical nurse specialist. Sarah and Katy both discussed how these nurses appeared to either resent their role, did not acknowledge their expertise or did not assist them when it would be very easy to do so; for example, by referring patients who may be eligible for a study. However, Andy stated that in his experience clinical nurse specialists (CNSs) were very helpful and did refer potential participants. From the literature, Jones (2017) found that the CNS could provide a useful and supportive role. Stobbart (2012) described the clinical nurse specialist as an ally as they shared 'vagrant' status and that they were connected by difference in her unit. However, this was not explored by any of the CRNs in this study. Kunhunny and Salmon (2017) also describe issues with CNSs, noting that senior specialist nurses were sometimes gatekeepers to the patients. These authors quote

one of their participants as they saw it as 'research interference' as they would attempt to actively prevent the research nurse from speaking to a patient.

This may be related to the ongoing discussions regarding the importance of speciality and/or research knowledge for novice CRNs (McCormack 2004, Bird and Kirshbaum 2006, Campbell 2011, Rickard et al 2011, Whitehouse and Smith 2018). Chester et al (2007) indicated that both are important, but did not state if one took precedence. However, clinical expertise does appear to be associated with the perceived clinical credibility of the CRN (Gordon 2008, Bell 2009, Jones 2017). The discussions relating to this topic in the interviews were mostly balanced, with participant's giving a reasonable rationale why one may be more important than another. However, the participants identified that there may be more of a need to have speciality knowledge in the more atypical specialties (for example critical care). One topic related to this is the experience of having to learn about a new area (either the speciality or research), with a number of the CRNs (Sarah, Zoe and Andy) describing situations where they had experience of research, but either had a steep learning curve or their lack of clinical knowledge made them feel less comfortable. In this way, Benner's novice to expert model (1984) may be a useful framework, though the nurses also describe situations where they are experts to novices, which may present a more complex picture as there may be an expectation that more experienced nurses will have a good understanding of the speciality. This was identified by Gordon (2008) who suggested that more research was required on the implications of CRNs with less speciality knowledge. However, nine years later Kunhunny and Salmon (2017) confirmed that this was still a live issue. This represents a different finding from Hill and MacArthur (2006) who found that the development of research knowledge was more problematic for CRNs. However, since then the provision of clinical research training and education

has grown exponentially. Subsequently, most CRNs would have access to this as they move into a new CRN role.

Another set of relationships that was deemed to be important was with medical colleagues. As stated in the previous chapter, this was not a topic that I anticipated exploring; however, the CRNs raised it in terms of their working relationships and how this can facilitate or impede their relationships with other nurses. Principal investigators (PIs) are cited in the literature as holding key positions as employers/managers (Hill and MacArthur 2006), though their role as a facilitator to enter a clinical environment has not been described; therefore, it was also included. Tina, in particular, stated that the relationship between the CRN and the PI is very close and Helen suggested that it can be very useful to engage with the PI on the occasions that other doctors need to undertake some research-related duties. However, some CRNs (Tim and Helen) were acutely aware of how a close relationship with medical staff may be negatively viewed by other nurses. Indeed, Helen attempted to build solidarity with the nurses by using humour when referring to medical staff. Another aspect of this relationship related to Andy's aim to ensure that he conveyed himself as competent to the PI. Katy also expressed that she was acutely aware that the PI was responsible for sourcing the funds for her contract to be renewed, adding pressure to ensure that recruitment targets are met. This situation could be ethically sensitive, as pressure is applied to recruit. Generally, job security and contracts are an issue that was raised by a number of the CRNs. Despite this, some literature states that CRNs consider the relationship they have with the doctors very positively and that this is one of the most favourable aspects of the job (Rickard et al 2007).

Katy also stated that she is often involved in guiding and supporting new research fellows. This could be seen to be a departure from the perception that CRNs can be a

'handmaiden' to doctors (National Council for the professional Development of Nursing and Midwifery 2008), though this might be mitigated by her previous comments regarding relying on medics for renewal of contracts. The literature on this topic encompasses a variety of experiences. Some of this relates to CRNs fearing that they would be perceived as the doctor's 'handmaiden', despite the fact that they often led the physicians in research conduct (Stobbart 2012).

The CRNs also appeared to value their relationship with other clinical research nurses. Katy, Tina, Andy and Sarah all highlighted how important this can be in terms of support, but also as a vehicle for general acceptance and integration. This was more important for novice CRNs who used the reputation of longer-standing CRNs to explain their role and gain access to the patients for research purposes. This also links to the need for social capital to be earned, a topic that Sarah, Tina and Peter alluded to in order to gain access, and acceptance, into the social groups in the clinical area. CRN leadership has been explored in terms of managerial support (Jones 2017, Kunhunny and Salmon 2017), however the role that these leaders play in acting as a conduit to establish relationships should be explored in greater depth.

Despite a number of the CRNs describing problematic instances with clinical nurses, only Sarah discussed that she felt isolated from others in her clinical team. Isolation has been widely described in the literature over a number of years (Hill and MacArthur 2006, Rickard et al 2007, Spilsbury et al 2007, Bell 2009, Coulson and Grange 2012, Eastwood et al 2012, Hemingway and Storey 2013). Despite Sarah's experience, she also lauded the local efforts to build a clinical research nursing infrastructure and support network. The fact that none of the other CRNs involved in this study stated that they had experienced feelings of isolation could indicate that local, and national, initiatives to support CRNs are having a demonstrable effect and that the CRN

workforce feel that they have colleagues with whom they can liaise and seek guidance. It possibly also reflects more of a tendency for a team-research approach, rather than CRNs working exclusively within a hierarchical system led by a principal investigator.

Another topic that emerged from the data, related to whether the CRNs felt part of the nursing (or clinical team). This varied significantly based on where the CRNs were situated. Janet, Peter, John, Tina, Tim and Zoe all worked in environments where they felt part of the clinical team. This was seen to be advantageous, even though there were still individuals in these environments that could be more difficult to deal with. As mentioned in the exploration of culture above, an accepted standard operating procedure helped to embed this in some of the areas, as well as a feeling that research generally dovetailed with clinical care. Others (Katy and Andy) partially felt part of the team, though other comments from Katy somewhat contradicted this. Whereas, Sarah most definitely did not feel part of the team, which was in stark contrast to her previous CRN role, where this was very much the case. Helen also did not feel part of the nursing teams where she worked, citing examples where this was uncomfortable for her. This may resonate with what Stobbart (2012) referred to as entry into *first order places*. This relates to clinical spaces that CRNs can legitimately inhabit. If the culture is positive, then their presence and work is justifiable; whereas if the culture is not conducive to research, they may feel less welcome and uncomfortable. It may also reflect a potential conflict between research and clinical care. This may be due to the fact that research is usually hypothesis driven (as opposed to needs driven) and clinical care is determined by a patient's individual needs (Chen, Miller and Rosenstein 2003). It could also reflect the clinical nurses' reluctance to refer patients to the CRNs unless there are no other treatment options available.

Helen referred to the fact that she missed the camaraderie of working as part of the clinical nursing team. As explored earlier, she was keen to use humour to assist in establishing this in her CRN role. These feelings she developed as a clinical nurse were built as a consequence of the team working together to seek positive outcomes from stressful situations. Goosen (2015) stated that this type of positive teamwork can assist nurses, by allow caring to become more efficient and easy. The nature of clinical research meant that this was not replicable in her current role, though she did feel part of the research team. This is something that was recognised in the literature as far back as the early 1990s, when Chadwick indicated that she missed the camaraderie of working on a ward, but saw the autonomy that the role afforded as recompensing for this (Chadwick 1992). Autonomy is a topic that will be explored later in this chapter.

Tinkler et al (2017) refers to experiences such as these; describing CRNs as being on the outskirts of the clinical team. This follows on from Stobbart's findings (2012) that CRNs might be in a liminal state (on the threshold) with the clinical environment. Jones (2017) also refers to CRNs being squatters in the clinical area. Other research does not explicitly refer to whether CRNs feel part of a clinical team, rather they describe experiences in which CRNs are accepted, or not, by colleagues (Gordon 2008, Bell 2009, Grange and Coulson 2012, Tinkler et al 2017). The findings from this research, and well as the literature cited above, may indicate that this is an important issue for CRNs, especially if solutions to this phenomenon can be found. As indicated in the findings chapter, a limitation of this research is that I did not make a distinction between nursing and clinical teams in the interviews. On reflection, this was an error, and may have lessened the theoretical generalisability of the findings in this context. According to Smith, Flowers and Larkin (2009), this is an aim of IPA.

This section has explored a variety of subjects related to the relationship and rapport that CRNs strive for and the resistance they may encounter. It has highlighted where the findings of this study reflect the literature, but also where new perspectives were identified or developed. These relate to the perception of harm, black-listing of nurses, the importance of not being associated with doctors to develop relationships and the importance of participating in research that is perceived to develop nursing care.

The next section will interpret the participant's experiences related to the strategies that were employed to engage with clinical nurses.

5.2 Super Ordinate theme two: Strategies for engagement

All of the CRNs indicated how vital active engagement was to the successful conduct of their role. It was discussed that it was incumbent on a CRN to reach out to clinical nurses in this way; however, a number of different strategies were employed to achieve this.

One of the main methods that CRNs used, was to help out with clinical duties. Some of these may be as part of research procedures (for example taking clinical blood samples whilst taking blood for research purposes), but others may be caring responsibilities that have no direct benefit to the research itself. The benefit of this has been recognised in the literature (Johnson and Stevenson 2010, Lawton et al 2012, Kunhunny and Salmon 2017). This may be done for many reasons; it could improve patient care, help to convey team working, re-affirm the nursing status of the CRN and also help to build a collaborative relationship with the clinical nurses (Jones 2017). In this context, Helen disclosed her hope that helpfulness is reciprocated, thus representing an approach that encourages a quid pro quo arrangement with the nurses. Paley (2014) stated that this type of social psychology is important to build relationships between nurses. Peter discussed how this can also be used to dispel the stereotype of CRNs walking around with a clipboard. Tim gave an example of the positive experience of an elderly patient who was participating in a trial, thereby helping to build a relationship with the patient, which made the woman feel better and also allowed the CRN to observe the woman's condition. He also expressed that he felt guilty when the clinical area was busy and he had sought permission from his manager to help out. However, he was acutely aware that this was not something that could be relied upon and had to decline other requests to help. This exemplifies two of the individually positive and negative aspects of research; both increasing contact

and feeling guilt in conducting research whilst the unit was busy. This is recognised in the literature as the boundaries between clinical and research care can become blurred (Hemingway and Storey 2013).

Clearly, regardless of the rationale/intended consequences, the CRNs were providing clinical care; this is alluded to in the literature. Poston and Buescher (2010) identified that CRNs need to strike a balance between clinical and research care, whilst Lawton et al (2012) indicated that research staff may attempt to address potential role conflict by undertaking clinical care and research. Also, Hemingway and Storey (2013) referred to the overlap between the clinical nurse and the CRN. Lawton et al (2012) continued to propose that more research should be conducted on organisational and personal features that impact on research delivery. Blurred boundaries between roles could have wider consequences, as patients may become confused as to what is clinical care and what is research; potentially leading to therapeutic misconception (Appelbaum, Roth and Lidz 1982). These experiences somewhat contradict Stobbart's findings that CRNs are in a liminal state (2012). Rather these reflect that CRNs could exhibit duality, by inhabiting a dual, or hybrid, state; simultaneously working as a CRN and a member of the clinical team. Clinical responsibilities are not usually incorporated into the job description of the CRN, but this may provide an insight into some of the nuances of the role. Lawton et al (2012) and Larkin et al (2017) also describe the conflict that this can cause, as CRNs time is divided between providing clinical care and undertaking research. This can be especially acute for CRNs who hold a managerial role (Jones 2017). The concept of duality may be usefully explored in future research.

As indicated above some of the CRNs disclosed that they utilised 'helping out' to ingratiate themselves onto clinical nurses. This was usually achieved by accentuating

the positives of the relationship by being overly nice/apologetic or by going on a 'charm offensive'. Many of the examples that that CRNs gave appeared to be a magnification of what would have, otherwise, been required. Katy, Helen, John and Andy explored times when their actions were positive in the extreme, but Zoe and Helen reflected that this approach may be lessening the perceived importance of research, as it legitimises the perception that it is not a component of the overall package of care. Helen also equated this to a time when she was working as a clinical nurse. For her, apologising for clinical care would have been unthinkable and the fact that she felt compelled to do this for research was not comfortable to her. Nevertheless, it was a strategy that was successful, and as such was difficult to disregard. This is an interesting dichotomy, in that subservience (or self-deprecation) may be a way to build relationships with clinical nurses. However, it also has the consequence of potentially undermining the importance of research; thereby feeding into the notion that research is an optional extra. This could undermine the principle that research should underpin nursing practice (Parahoo 2006) and also diminishes the potential role that CRNs have in promoting evidence based practice. Houlston (2012), in particular, noted that this is an important role of the CRN. However, if this is being compromised by the actions of some CRNs, then it is worthy of further exploration to establish the scope and impact of this approach.

Another consequence may relate to the growing imperative to capture the time taken to undertake the duties conducted in clinical trials (Aldridge 2018). There are study intensity tools that do this to determine the workload involved in studies. These are useful to quantify the time associated with research and can form the basis for increasing the CRN workforce (Gough and Cameron 2012). However, they do not explicitly include either time to build relationships with clinical staff, nor do they allow

time for clinical duties to be undertaken. Following on from the reflections of the some of the CRNs in this study, it could be argued that both would be useful to build and maintain good working relationship. Yet, at the moment they are being undertaken 'unofficially'. It is recommended that these should be considered moving forward. Whilst this is not directly linked to relationships, it does emphasise the time involved in developing these, so should be considered in the wider context of this process.

Some of the CRNs (Katy, Tina and John) disclosed that they reward participation in research with sweets and pens. John adopted a novel approach by providing written feedback to nurses who have been particularly helpful. This can then be used when the nurse comes to revalidate with the Nursing and Midwifery Council. This could be seen to be positive, as it assists in building goodwill with nursing colleagues and demonstrates gratitude for helping with studies. However, it may perpetuate the feeling that research is over and above the day-to-day responsibilities of nurses and that incentives are needed to compensate for this. Jones (2017) explored this in her PhD indicating that clinical nurses appreciate when CRNs help with clinical care, and that CRNs used 'favours' and 'bribes' to encourage nurses to help them, though one of Jones' participants expressed concern that this was manipulative on the part of the CRN. In a seminal paper on token economy Kazdin and Bootzin (1972) stated that tokens can be a tangible way to reinforce positive behaviour and Ivy et al (2017) confirmed that they are still a useful tool in contemporary healthcare. However, most of the research on this relates to attempts to encourage patients to comply with treatment, rather than to encourage positive behaviours with staff. In relation to clinical research, Jones' research and this study represent the only exploration of this concept. It is recommended that the use of incentives in this context should be explored in future research.

An important issue for the CRNs again related to their associations of being a nurse. In this case it was connected to whether they wore a uniform. Shaw and Timmons (2010) conducted a qualitative study on the perceptions of uniforms, and suggested that they are important for self-image and professional identity. Many of the CRNs in this study did not wear a uniform, and for some they were the only group in their department that did not do so. This had the effect of making them very distinctive. Zoe also felt conspicuous because she wore her own clothes, disclosing that she found this to a barrier to inclusion in the team. Peter indicated that not wearing a uniform was partly to avoid situations where patients or relatives would ask for assistance. However, he stated that this did not preclude the CRNs in the unit from undertaking clinical duties. Janet had a similar perspective in terms of avoidance of confusion, but she also indicated that the lack of a uniform provided a degree of protection from feelings of personal guilt, as patients or relatives may otherwise have expected her to do things like answer the phone, rather than read the patient's notes. She concluded by suggesting that a separate uniform may be beneficial. This perspective was confirmed in a small study of 15 parents and 42 staff in a paediatric intensive care unit, both parents and staff (62% and 67% respectively) stated that it would be beneficial for CRNs to wear a uniform. Though, there was no agreement as to what the uniform should be (Spry and Holdback 2015). Jones (2017) found that there was no consistency in the colour of the uniforms that CRNs wore, but that it could convey a degree of separation from the team if the uniform was different. The CRNs in Jones' study also disclosed that they had a better response from patients when wearing a uniform. Andy expressed similar feelings, in terms of recognition by patients, but also indicated that the lack of uniform was not a barrier to conducting clinical duties, when required. Helen did wear a uniform and saw it as providing armour, but then describes

it as providing camouflage when she was on the wards. She acknowledged that wearing her own clothes may have given her more authority, but it would also have left her open to be singled out, which she did not see as being beneficial. Zoe did not wear a uniform, but indicated that she would like to. In her opinion, not wearing a uniform could lead a CRN to be seen as elitist and different from her clinical nursing colleagues, this may be related to Jones' (2107) findings. Zoe also felt that not wearing a uniform perpetuated that conception that CRNs were more closely aligned to doctors. Jones (2017) also identified that uniforms conveyed a sense of identity and that they contributed to increasing visibility to patients and staff. Her conclusion was that uniforms were beneficial and recommended that a distinct uniform be established. In Scotland, there is a national uniform for different roles/NHS bands. It is unclear whether this would make the implementation of a separate uniform for CRNs more, or less difficult. Stobbart (2012) found similar positive and negative aspects of wearing a uniform. The CRNs in her unit did wear a uniform, but it was distinct from the clinical nurse specialist.

To wear, or not to wear, a uniform is becoming a perennial discussion within the CRN community. The difficulty is that there is no definitive argument to state that one view has precedence over another. On balance, Jones' suggestion that a separate uniform be adopted, appears to be the most palatable, though the specifics of this need to be addressed centrally. It is recommended that it is incorporated into wider discussions regarding how atypical roles might be recognised in a clinical setting. However, this research indicates that neither solution would be universally popular. These differences represent somewhat of a dichotomy; whereby CRNs have an internal debate regarding demonstrably being a nurse (by way of wearing a uniform) and feeling obliged to participate in clinical care or having the flexibility/neutrality of not

wearing a uniform and feeling guilty about being perceived as being separate. There was also the suggestion that uniform might act as armour, protecting the CRN. It was also identified that a lack of uniform may be perceived as being elitist. This may have been particularly acute in some units where the CRNs were the only members of staff not to wear a uniform. Shaw and Timmons (2010) state that the nursing uniform acts as a powerful symbol. They can demonstrate power, identity, self-image and pride; leading to enhanced confidence and recognition from the public. Although it was outside the scope of this research, more information of how clinical nurses perceive this would usefully add to this discussion.

Visibility, more generally, was a topic that was raised by some of the CRNs. Tim, especially, linked this to feelings of team working by explaining how this facilitated successes being shared with the clinical team, largely because the CRNs are present on the unit every day. In this way, the CRNs feel as though they are more deeply embedded into the wider clinical team. For Tim, the success of the research in the unit and the visibility they have are inextricably linked. Peter also stated that having a presence in the unit allows for a more considered approach to how research can work alongside clinical care, whilst also breaking down barriers. He acknowledges that it is not a definitive answer, but can be an important contributory factor. Katy disclosed that whilst not being based in her unit, she makes an effort to have her coffee breaks in the staff room. This facilitates the ability to have conversations with staff nurses, thereby helping to become more visible. Zoe reflected that this was particularly helpful during a study that necessitated that the CRNs spend time with the clinical nurses. This was accentuated as the clinical nurses saw the benefit of the results of the study to their practice. This is also an issue for other healthcare professionals, where

visibility of roles and functions can assist in a deeper understanding of practice (Walsh 2018).

However, not all CRNs had the same level of visibility. Janet, Andy and Helen all articulated that a lack of visibility was detrimental to their work, as clinical nurses are less aware of the research being undertaken and relationships subsequently are more difficult to establish. Helen, especially highlighted the transient nature of her role, and how the research that she was conducting may not fit seamlessly with the clinical care that is being provided by the nurses on the unit. This transience added another degree of complexity in terms of establishing positive relationships with clinical nurses and reflects the findings of Stobbart (2012) and Tinkler et al (2017) that CRNs do not feel that they belong in some clinical spaces. Whilst these findings relate specifically to CRNs they may also contribute to wider discussion of the importance of research being visible in the NHS, and the nursing and midwifery role in this (Peate 2018). Longhurst (2017) discussed the implementation of burgundy tunics for nurse directors and clinical nurse managers in NHS Scotland. These were introduced to make these roles more visible to patients and staff. These initiatives and measures highlight the importance of the visibility of the nursing workforce and should be considered for CRNs.

Gaining access to potential participants was something that resonated with some of the CRNs. As mentioned previously, one of the units had a standard operating procedure (SOP) that stipulated that CRNs could approach patients without necessarily approaching the clinical nurses first. Peter discussed this in detail. The unit in question had been so successful in developing a research portfolio, that other specialties had started to seek them out to develop collaborate partnerships. There was an arrangement in place that the SOP was applied in each of the collaborating

units. Therefore, if Peter was collecting data in a collaborating speciality, the SOP would allow him to directly approach patients on that unit, without speaking to the nurses first. Whether this would happen in practice is unclear, but it did convey a confidence in the role and the process that was not apparent in some of the other CRNs.

Conversely, two other CRNs (Andy and Helen) utilised a self/role deprecating approach and/or humour. Andy acknowledged that he had described himself as a 'pretend nurse' to clinical nurses, thereby highlighting the difference between the roles and diminishing the importance of his own. He was aware of this, and acknowledged that fundamentally he did not feel this way. Nonetheless he felt it necessary to describe himself in these terms to others. Helen disclosed that she was "happy to make a fool of herself" and that she could play up the "bumbling research nurse". The aim of this was to appear unthreatening and to emphasise that the clinical nurses had the speciality knowledge that she did not possess. Helen found that this approach helped to "grease the wheels". In doing so, Helen acknowledged she was giving power to the nurses, but felt that they had the "sticks", whilst she had none. She concluded this discussion by stating "You've got to start by getting someone else's confidence. Hopefully, they will then help you to get what you need". It is interesting that Helen chose to use metaphors to describe this experience ('blumbling' and 'sticks'). This may reflect her approach to lessen the formality of research and her use of humour to build relationships. The fact that she stated that clinical nurses have the 'sticks' infers that they hold a powerful place in this relationship.

Whilst most CRNs might recognise the use of self-deprecation and humour as an approach that they could use, it may lessen the perceived importance of research. Despite the evidence that this approach is successful for some of the CRNs, the

precedent that this sets could continue to support clinical nurses' feelings that there is separation between care and research. If this continues this may be detrimental to future clinical research. This could represent a concept called dramaturgy. This is a concept that interprets actions as a dramatic performance (Holmes 1992). It is based on the work of Erving Goffman. Goffman suggested that individuals may perform for the benefit of others (Goffman 1959). This can be used to explain the interactions between individuals and may determine why some of the CRNs describe a strategically humorous, or overtly friendly, approach to build relationships with clinical nurses.

The approaches, and philosophies, demonstrated by Peter and Helen appear to be in stark opposition. This led me to consider how confident each CRN was and how this was practically implemented.

Peter and Tim appeared to be the most confident, largely due to the culture of the unit in which they work and the value that is placed on research. Katy and Sarah demonstrate confidence, but this is based in their own self belief in what they are doing, rather than being derived from the culture in which they are based. Andy, John, Tina and Janet articulated a more flexible approach, depending on the situation in which they found themselves. Whereas, Zoe described an initial lack of confidence in her clinical skills and Helen reflected on her propensity to use self-depreciation or humour to gain the confidence of clinical staff. Interestingly, I do not believe that either of these two CRNs are, in fact, lacking in confidence as Zoe was indignant when confronted by the nurse who indicated that the research study was harming patients and Helen's use of humour and self-deprecation was a cognitive decision rooted in the necessity to form a rapport in a very short period of time. This might also indicate that there may be other contributing factors that could add to novice to expert development,

as described by Benner (1984). However, the exact picture in these circumstances appears to be more complex, as although the transition from clinical practice to clinical research can be problematic (Kunhunny and Salmon 2017), the CRNs are not reverting to being complete novices, as they retain general nursing skills and the research knowledge they have obtained from their education and practice. Tinkler et al (2017) also contend that CRNs often do not attain expert status, due to the ever changing nature of the workload, rather they move in a fluid way from novice to proficient, and back.

This led to exploration of whether there was an optimal approach. One might suggest that it is best to create a culture where research is accepted by means of policies and practice, or one where CRNs feel the need to, in some ways, diminish their own contribution and use humour to build relationships. However, it is difficult to establish if this is commonplace in the NHS. Even still, Peter acknowledges that it does not always work. Equally, though differently, Helen's approach demonstrates a considered plan to gain the confidence and support of busy clinicians. It must work for her, otherwise she would not have persevered with it. These methods do serve to demonstrate the complex landscape in which CRNs practice. It would appear that, currently at least, a universally applicable approach would be counter-productive and that CRNs require a repertoire of approaches that they can employ. What must also be considered alongside these strategies is the perception that some clinical nurses have about CRNs. For example, a nurse who considered that CRNs "swan" into the ward may not appreciate Peter's approach. Also, a nurse who sees CRNs as not being 'real' nurses may have their feelings confirmed by Helen's strategy. This is out-with the remit of this study, but it is worthy of further exploration to assist in improving the

perception of clinical research and to enable CRNs to have the confidence to build truly positive working relationships.

Some CRNs indicated that they felt that they used public relations (PR) or sales techniques with clinical nurses. Tina, Zoe, Andy, Peter and Helen acknowledged the potential importance of this in quickly developing a rapport with staff, and how utilising this approach can reduce the likelihood of antagonising nurses. This was also highlighted in a recent publication as an approach that CRNs employ (Tinkler et al 2017). John not only used this approach to promote the studies, but also his own role. However, he acknowledged that the fact that he had to do this was sad, as it inferred that research is not important enough, in itself, to be accepted without employing such methods.

Dissemination of research results was another topic that the CRNs discussed. The results were disseminated in a number of ways. Tina's unit used a shared drive to post information on studies that had been conducted there. However, she acknowledged that the research team could be more proactive with this. Andy discussed how one of the other CRNs in her team shares the publications that come from studies that they have participated in, but again discussed ways in which this could be improved. John described a similar scenario, though added that shift patterns was an obstacle to dissemination. Additionally, Janet described an informal approach, where she uses general discussions to inform staff about how local research has improved practice.

However, many of the CRNs indicated that the length of time that it takes for research to be published (around 10 years in many cases) can detract from the impact that dissemination can have. Subsequently, as previously discussed, shorter-term and studies that are deemed to be more 'relevant' to nursing can be advantageous.

Tim described a more positive situation in his unit. The research team produce posters and a regular printed update that detailed information about new and previous studies. The updates also include patient stories, which are deemed to be particularly powerful. Zoe indicated that disease-specific link nurses in her unit were very helpful as they could act as a conduit to the clinical team. Educational sessions were also offered by some CRNs (Tina, Tim and Andy) and Janet, Tim and Helen also used these as a method to disseminate information about their role. John took this even further by utilising such sessions to re-enforce the importance of evidence based practice and how nurses could be more actively involved in this. The existing literature reflects some of this. Stobbart (2012) found that clinical nurses stated that they did not have enough knowledge on the research projects in the area, but also disclosed that they did not engage with the material that was there, even stating that they were too busy to look at a notice board. Stobbart also found that providing education was part of the CRN role, though this was made more difficult due to infrequent recruitment and the clinical nurses' workload. In Japan, Fujiwara (2016) stated that dissemination, especially of the CRN role was essential to raise the profile of the role. However, despite the relative lack of discussion of this in the literature, from the findings above it can be concluded that a greater effort should be made by CRNs to disseminate information regarding the studies and their role. Even if the results are ten years old, they can help to develop a deeper understanding of the life cycle of research and how local input can help to change and improve practice.

In this respect CRNs could be seen to be agents of change. Agents of change can lead a sustainable and transformational improvement in care that also develops the motivation of others (Tyrrell and Pryor 2016). This is a role that has not been fully explored in the CRN literature, but there are indications from this study that benefits

can be achieved by presenting a positive picture of research; by demonstrating the enhancement of evidence based practice or disseminating results. This was highlighted by Kunhunny and Salmon (2017) who identified that CRNs are perfectly placed to navigate novel approaches to patient care. Implicit in this is the role that the CRN can take in strengthening the link between an evidence base and practice. This should be nurtured and encouraged to the fullest extent.

This section has explored the strategies that CRNs use to engage with clinical nursing colleagues. It has highlighted that the participants' used a variety of approaches to achieve this. This theme has also highlighted new information relating to the use of humour and how research-focussed policies can help to embed research in clinical areas. It has also contributed to the on-going discussion relating to uniforms, visibility, being overly friendly, use of rewards and the utility of helping out.

The next section will explore the personal perspective that impacted on the CRNs ability to establish relationships.

5.3 Super-ordinate theme three: Personal perspectives

This section will explore the personal perspectives that the CRNs identified as being salient in the building and maintenance of relationships with clinical nurses.

A topic that was explored by a number of the CRNs was the opinion that they are not 'real' nurses. This was particularly important for some as it impacted on their perception of self. Andy, who referred to himself as a 'pretend nurse', especially when interacting with other nurses. The literature review highlighted that this does not appear to be a unique finding, with some authors describing similar feelings (Bell 2009, Tinkler et al 2017), whilst others describe a lack of recognition of the role associated with diminished value of the CRN (Roberts et al 2006, Rickard et al 2007, Rickard et al 2011, Roberts et al 2011, Catania et al 2011, Eastwood et al 2012). This could reflect a simplistic view on the scope of potential roles within the nursing profession. However, it may reflect a tendency to be suspicious of any deviation from what is seen to be fundamental nursing practice. Janzen et al (2013) questions whether the concept of a 'real' nurse is even relevant to modern nursing practice; suggesting that it is a "composite, socially constructed mirage that has become mediated and portrayed by history, culture, and sociality" (page 172). This is a point made by one of the participants when they made an analogy between how CRNs workload is viewed and the charge nurse's workload. Indicating that as they are out of the line of sight, and do not participate in as much basic nursing care, they are deemed to be less of a nurse. This also could represent a general difficulty with research in the clinical setting. However, many of the CRNs indicated that a more positive view on this, encouraged at an early stage of each nurse's career, could result in a reversal of this position.

Related to this, three of the CRNs (Tina, Katy and Janet) indicated that they feel that clinical nurses see the CRN role as being 'easy'. This reflects a general position in the wider literature, where CRNs role can be poorly understood and their contribution questioned (Bell 2009, Rickard et al 2011, Tinkler et al 2017). All three CRNs explained that this is erroneous and that whilst the stress experienced may not be the same, there still is stress associated with the job. This again indicates that there is a lack of understanding of the full scope of the CRN role.

This was identified by Campbell (2011) as emotional labour that the CRN had to process and manage. Emotional labour in nursing involves managing the emotional demands of relating with patients, families and colleagues (Delgado et al 2017). If this emotional labour is not acted upon effectively, the ethical and emotional aspects of the role can be detrimental to the nurse, contributing to stress and burnout (Gray 2009, Delgado et al 2017). It is possible that this could be a factor for Janet and Zoe, as they questioned their contribution to nursing or whether they, themselves were 'real' or 'proper' nurses. Additionally, Janet identified that it was only after she became a CRN that the full scope of all of the patients' conditions on the unit became apparent to her, causing her to be emotionally drained by this process. Janet was working in a high dependency environment, so this may have been peculiar to this type of unit, but it does demonstrate that CRNs may experience emotional labour differently to their clinical colleagues. Conversely, Stobbart (2012) found that clinical nurses perceived CRNs to experience less emotional aspects of their work, as they are not involved in clinical care. Tinkler et al (2017) also identified the emotional labour that CRNs encounter when attempting to build relationships with staff, confirming that this is not a unique phenomenon. Whilst not being directly associated with the research question,

these concepts may assist in understanding the perception of CRNs and how CRNs perceive themselves.

During the discussions it became apparent that the autonomy available in the CRN role was a substantial attraction to many of the CRNs (Zoe, Tina, Sarah, John, Andy and Katy). This allowed the CRNs to effectively plan their workload, whilst allowing flexibility should the necessity arise. However, Katy also expressed that this could result in some resentment from clinical nurses as they appear to feel that they are very tightly managed, whilst she is not. Additionally, Spilsbury et al (2007) found that clinical nurses felt that CRNs were 'checking up' on them and that this could lead to disharmony. The autonomy in the role is a recurrent theme in the literature as it is deemed to be a beneficial aspect of the role that can help to attract nurses to become CRNs (Rickard et al 2007, Spilsbury 2007, Roberts et al 2011, Eastwood et al 2012, Stobbart 2012, Kunhunny and Salmon 2017). However, Jones (2017) found that one of the Lead CRNs indicated that this role can lead to a reduction in autonomy and interaction with clinical staff and Stobbart (2012) also postulated that autonomy can also lead to isolation as freedom may be construed by some as a lack of support. Yet, this was not noted in this study as autonomy was universally seen as an attractive aspect of the role and was highly valued by the CRNs who discussed it. However, Katy explored that clinical nurses may be envious of the freedom of the CRN role. If this was the case, then it may be reflected in the relationships between the two groups. However, without information from clinical nurses, this is impossible to establish.

Whilst autonomy is largely perceived as being a positive attribute of the role, job insecurity and a drop in salary when moving into the role were mentioned as factors that could discourage nurses from becoming CRNs. This was not a specific focus of the research project; however, a number of the CRNs that were interviewed discussed

this topic. Subsequently, it has been included in the findings. Janet indicated that her salary had dropped by around £300 per month when she became a CRN, Sarah had difficulties when the funding for her previous post had come to an end and Katy alluded to recurrent situations where recruitment targets had to be met for salaries to be maintained. This has been cited in the literature previously as potentially raising ethical issues as CRNs may feel additional pressure to recruit patients into clinical trials (Hill and MacArthur 2006). The pressure that this could cause may also have an impact on relationships as the imperative to recruit could put a strain on CRNs.

Another personal perspective that some of the CRNs discussed was the moral obligation to offer research to patients. To them, this satisfied the ethical principle of justice (in that those who were eligible were offered the opportunity to participate) and autonomy (in that, once informed, the patients could decide for themselves if they wanted to consent to participate in the research) (Beauchamp and Childress 2009). John, Sarah and Peter mentioned this, with Peter emphasising that the philosophy in his unit made this easier to achieve. This conflates with gatekeeping by clinical nurses, as this could prevent patients from accessing the study (denying justice) or preclude them from the ability to autonomously decide whether they would like to participate. Also, for Janet and Helen, once consent had been obtained, this emboldened their position as they had additional authority to access the participant to collect the data.

Smith, Flowers and Larkin (2009) state that metaphors can be particularly powerful component of IPA. Allowing connections and conceptual meanings to be explored. In this way using metaphors allows for the textures of communication to be examined (Shinebourne and Smith 2010). This is only possible by a process of examination and re-examination of what has been said and what this could mean (Smith 2011b). In the context of this study it was hoped that the metaphors would provide an illuminating

insight into how the CRNs perceive themselves, or how they think that they are perceived by others.

In this study all but one of the participants described clinical research nursing using a metaphor (see Appendix 11). Sarah disclosed that CRNs had to be snakes to move around with stealth or be 'sneaky' to achieve its aims. This could relate to calculated strategies that CRNs employ and also how (in)visible they are in the clinical setting. Stealth also conveys a military aircraft that could be on reconnaissance or a bombing raid. Janet highlighted that CRNs have to have attributes of a chimpanzee (for example, intelligent, caring, flexible and strong willed), but also indicated that there was something of a vulture in the role, hovering over the scene to swoop in at an opportune time. This correlates with Sarah's snake metaphor, in that they are ready to pounce on their 'prey'. Andy also highlighted this when he indicated that the CRN has attributes of a spider; building a web-like network, but also catching people. Superficially this 'network' may have positive connotations. However, the predatory nature of a spider, who catches prey, then binds them up would seem to be far more prominent. Even the chimpanzee in Janet's metaphor may have more balanced attributes, but could have a violent side.

More positively, John identified Florence Nightingale's lamp, lighting the way for others. This illuminative metaphor could have many textures (to use Shinebourne and Smith's (2010) terminology) as this could be construed as a beacon of hope, alluding to the educational and constructive components of the CRN role or the context in which Florence Nightingale worked, the Crimean war. Conveying reassurance in a war zone. It could be a link to nursing and infer that CRNs are 'real' nurses (in Florence Nightingale's mould). Of course Florence Nightingale also, famously, was a great user of statistics; providing a link to research itself. Zoe equated the CRN role to a dog,

being loyal, happy and keen to please. Whilst Tim identified a swan – where the CRN has to be elegant and perfect. They can glide into a clinical area and make people feel like they are the most important person. This is interesting as analogies with a swan are often related to clinical research nursing, with phrases like “swanning around” indicating that CRNs are not busy are not involved in caring for patients. The swan metaphor may also resonate with Zoe’s concern that she would be seen to be elitist. Zoe, herself used the metaphor of a clipboard, as it is associated with CRNs and a dog, as they are happy and loyal. These seem to demonstrate functionality and emotion, which might represent the scope of the CRN role.

Tina gave metaphors of a bird, conveying mobility and other people traveling in a flock and a detective, as they try to piece together evidence and have to be alert to important information. Both of these convey pragmatic attributes, though a bird can also fly away from somewhere perhaps expressing a lack of belonging somewhere.

Peter and Sarah both gave an octopus and a metaphor, indicating that CRNs can manage multiple demand simultaneously. Sarah also noted that the octopus could camouflage itself (and disappear in a cloud of ink). Helen suggested a cuttlefish as it can choose to be flamboyant or camouflaged, indicating a repertoire of skills that the CRN has to employ. Interestingly, Helen had commented that her uniform could be a camouflage and it is likely that there is a link between these. Sarah’s comment regarding disappearing may also convey that she appreciates a lack of strong physical ties and can extricate herself when needed. This could also link to her explanation that stealth is require to achieve one’s goals.

It may be of note that three of the metaphors above (Snake, Vulture and Spider) are predators/scavengers. Shinebourne and Smith (2010) state that animals are often

used to detach or distance oneself from more negative perceptions. This may be the case with these nurses, though they did convey utility in the predatory nature of these animals, which may indicate that they value these skills. These predatory metaphors may also be illuminating as an insight as to how CRNs feel that they are perceived by others. Whilst other metaphors (lamp and swan) convey a more elegant and guiding impression. It would be informative to explore this in future research, as well as using a metaphor to gain an insight into how clinical nurses perceive CRNs.

This section has explored how personal perspectives can influence the relationships that CRNs have with clinical nurses. It has identified that there may be a perception that CRNs are not 'real' nurses and that this may even be a feeling that CRNs have themselves. It has explored the value in the autonomy that CRNs have and how job security may be an issue. Adding to what is already known on this subject has been an exploration of the usefulness of metaphors to describe the CRN role and how CRNs perceive the ethical and moral obligation of participating in research, especially once consent has been granted.

The next section will explore the external factors that impact on the CRNs ability to develop relationships with clinical nurses.

5.4 Super-ordinate theme four - External factors

The final super-ordinate theme relates to external factors that may influence the relationships that CRNs develop with their clinical nursing colleagues. As alluded to in super-ordinate one (Relationships, rapport and resistance), the culture in the units in which the CRNs work can be important in how they are accepted and how they can conduct their role in an optimal manner. Some of the CRNs indicated that the culture can be very positive, but that this links to a team-based approach. However, others highlighted cultures that are less positive. These are distinct from the more positive perspectives, in that they exclusively describe situations where the nurses see the absolute primacy of clinical care, with little room for incorporation of other aspects of healthcare (such as research). They also describe nurses who appear intransigent and resistant to change. The culture in which research is conducted has been explored in the literature with a positive culture being greatly valued (Bell 2009, Rickard et al 2011, Eastwood et al 2012, Lawton et al 2012, Hemingway and Storey 2013).

Related to this, is the research etiquette in the clinical area. This was important to some of the CRNs as they either saw how CRNs came into their unit and upset the clinical nurses by not following the etiquette, or because CRNs were anxious about not knowing the etiquette of units that they had to go into. Janet, in particular, had anxiety about CRNs from another unit approaching patients without speaking to the ward staff first. She indicated that this had caused some conflict. However, she later admitted doing something similar when she visited other units; by deciding to approach students rather than trained staff, because the students were usually more receptive. Andy noted that this was a courtesy that he was paying staff, whilst Helen and Andy indicated that they included the clinical nurses, even when it was not necessary. Much of the recent literature on etiquette in nursing has related to social media (Green 2017)

and does not describe situations such as these. However, in this study Janet, Andy and Helen indicated that a lack of awareness of the research etiquette in a ward could be detrimental to the CRN establishing a good relationship with staff. This aspect of clinical research nursing has not been described in the literature and should be explored to inform future practice.

The issue of etiquette appeared to be of particular relevance for nurses based in the clinical research facility (CRF) rather than the unit itself; as some of the CRNs indicated that this potential diminished feelings of ownership of studies that they were involved in. CRNs working in a CRF are employed to work on a number of studies, from a range of specialties. The benefit of this approach is that the nurses gain a high level of expertise in the practical aspects of research; often assisting the others in the team with planning the implementation of their studies. However, it does mean that these CRNs can be less involved in the full development of studies and that speciality-specific knowledge can be more difficult to acquire. Most of the CRF studies are conducted within the clinical research facility itself, though many require the CRNs to visit other units in the hospital to recruit and collect data from patients. The latter studies appear to be potentially problematic in this sense. Some of the unit-based CRNs sympathised with the poor reception that CRF nurses often face. Janet disclosed that not being from the unit may cause difficulties in knowing the ward routine and, importantly, when not to get “in the way”. She noted that CRF nurses may not pick up the subtle cues that indicate the opportune times to intervene. This reflects some of the liminal experiences of the CRNs in Stobbart’s (2012) study, though this ‘intelligence’ of the ward routine and understanding of optimal times to intervene has not previously been described. Katy and John commented on the depth of involvement that CRF nurses had in the studies. Katy felt that CRF nurses were only superficially

involved in studies, which could lead to diminished fulfilment in their role. John also raised a lack of ownership, and linked this to diminished autonomy (something that most CRNs find to be positive). Both alluded to a perception that there was more of a task allocation feeling to the CRF CRN's workload. However, Andy, who had experience of working in a CRF indicated that this environment was excellent to learn about research and appreciated the support that was available therein. Andy also reflected that there was something quite (positively) straightforward about being given a study once all the approvals had been obtained, noting that he liked being "gifted" a study in this way. It is likely that the ownership that non-CRF CRNs feel is related to their own autonomy to plan their workload.

Some of the CRNs also highlighted potential difficulties that CRF CRNs could encounter if they did not have knowledge of the speciality in which the study was being conducted. As previously explored, Gordon (2008) and Kunhunny and Salmon (2017) have identified that speciality knowledge is important for the CRN. American Nurses Association and International Association for Clinical Research Nursing (2016) also stated that CRNs should provide health promotion, disease prevention and advice on self-management. It would be difficult to achieve this without knowledge of the speciality in which they work. This was deemed to be especially difficult for CRF CRNs as potentially they could help with studies from any specialism in the hospital. Andy disclosed that whilst not wishing to diminish his previous role, the transition from being a CRF nurse to a speciality-based CRN was stark as in his current position he had to have clinical conversations with patients that made a comprehensive understanding of the disease process and the chronology of care, essential. Helen commented that a lack of recognition as having an understanding of the speciality can cause anxiety and that being based in a unit may give some authority that is not present for CRF

nurses. This reflects the position proposed by Tinkler et al (2017) whereby it is difficult for CRNs to become 'expert', as the knowledge and skills that they have to develop are constantly changing. The lack of recognition noted by Helen may be related to reduced visibility, as CRF CRNs are not based in the unit, but in a centralised area in the hospital. In addition to noting the lack of ownership that CRF nurses may have, John also felt sympathy for CRF nurses in his unit. He noted that they were there to recruit and did not have the same level of freedom to promote research nor were they embedded in the unit. However, he did discuss that there was an attraction to employing CRF nurses; because they have had excellent grounding in the practicalities of conducting research and are in a prime position to move onto other CRN roles. Jones (2017) found that CRFs can be seen as being distant from the rest of the hospital and perceived to have a poor understanding of the other departments. If CRF CRNs do have difficulties, as described above, then this may acutely reflect the liminal state described by Stobbart (2012) with the units they visit. It is recommended that the working relationships of the CRF CRNs should be investigated further, especially as the number of CRFs is growing, with the National Institute for Health Research indicating that there are now 45 CRFs in the UK and the Republic of Ireland. Following discussions regarding the perceived resistance of clinical nurses to help with research, a sample of job descriptions from the health board in which the CRNs worked were reviewed to ascertain if research is alluded to as part of these roles. The specialist nurse job description indicated that they may participate in research, whilst the band 7 nurse should be actively involved in research. However, the band 5 and 6 job descriptions do not mention research at all. This is surprising as the professional standards of practice and behaviour state that nurses and midwives should "collect, treat and store all data and research findings appropriately." (Nursing and Midwifery

Council (NMC) 2015, page 9). Additionally, guidance on national job profiles from NHS employers indicates that band 5 nurses should regularly undertake research and development activities, including clinical trials NHS employers (2018). Subsequently, it is recommended that all nursing job descriptions make explicit that research is part of the role and that nurses should be involved in this activity.

A final external factor relates to the extent that undergraduate nursing programmes prepare nurses for clinical research and potential careers in this sector. This was deemed to be of importance because it was felt that if there was a positive opinion developed as a student nurse, then this would translate into a positive attitude once the student qualified. John indicated that, in his experience, many undergraduate nurses critiqued research as part of their programmes, but his perception was that the practicalities of conducting research were not explored. Peter explained that his experience is that nurses consider research to be dry and that often undergraduate modules lack dynamism. Subsequently, the CRNs in his unit meet with new clinical nurses to encourage them to see the research in the unit in a positive light. Zoe highlighted that the undergraduate modules encourage student nurses to critique research, but do not encourage the students to understand how nurses are often crucial in these studies. She identified the importance of targeting undergraduate nurses and attempting to ensure that each have some kind of research placement. The rationale for this is to instil that research is not just theoretical, but also practical. Tim disclosed that he actually chose a top-up degree programme because it did not have a research module. His reasons for this were that he found research to be “dry and boring”. This could perhaps represent a missed opportunity, as nurses like Tim could be enthused about research, but his nursing education had not done that. Tim explained that in his unit, undergraduate nurses spend time with the CRNs, with the

aim of providing an understanding of the work that is being conducted and to enthuse them about research.

This topic has been explored in the literature. Rickard et al (2011) and Kunhunnu and Salmon (2017) highlight the importance of ensuring that student nurses have exposure to CRNs as part of their training. Galassi et al (2014) and Henoch et al (2014) both noted that student nurses should have additional knowledge and skills in research to raise awareness of its application in practice. Additionally, Harrison (2014) and Whitehouse (2017) found that student nurses benefitted from exposure to clinical research nurses as part of their training. However, Galassi et al (2014) also found that a wide range of nurses indicated that research education would be best placed at post graduate level. that The NMC (2018) also state that education providers and practice placement partners should facilitate opportunities for students to have experience of research collaboration and evidence-based developments in the practice settings.

As suggested by one of the CRNs, perhaps the necessity for undergraduate nurses to undertake a research project might increase their awareness and appreciation of research. The findings of this study add weight to these findings and should be considered as a component of undergraduate nurse training programmes. This will be disseminated via publications with the higher education sector.

This section has explored a number of topics including the importance of the culture of the clinical environment and how engagement with student nurses is crucial to develop positive attitudes in the future. New concepts identified in this study include exploration of the importance of an understanding of the etiquette in the ward, especially for CRNs based in a clinical research facility and how nurses' job descriptions might be modified to assist in conveying that research is part of their role.

5.5 Summary of discussion

This chapter has explored the findings of the study, contextualised these with the literature and analysed the sense that the CRNs made of their experiences. It has not been a linear process, as many of the topics overlap and might have been presented under a different super-ordinate theme. This is not unusual; as qualitative research findings are often tightly interwoven with each other (Parahoo 2006). However, every attempt has been made to maintain transparency and linkage with the evidence that the CRNs provided. This chapter has also explored frameworks and models that may be useful to contextualise the relationships between CRNs and clinical nurses. Some have been previously cited in the CRN literature (for example Benner's model and liminality) and others are new to this area (duality and dramaturgy). Collectively these assist in providing a theoretical underpinning for the CRNs experiences.

Chapter six- Recommendations

6.0 Summary of recommendations

A summary of the recommendations can be found in Table 5. These are explored in detail below.

Table 5 - Summary of the recommendations

| Recommendation number | Detail |
|-----------------------|--|
| Recommendation 1 | Efforts are made to establish greater visibility in the clinical areas. |
| Recommendation 2 | Consideration could be given to adding a 'relationships' component to study intensity tools. |
| Recommendation 3 | A separate uniform for CRNs should be implemented to increase visibility and recognition that the CRN is a nursing role. |
| Recommendation 4 | CRNs could encourage clinical nurses to undertake research and strengthen the link between evidence base and practice |
| Recommendation 5 | Results from all studies should be actively disseminated to the clinical areas |
| Recommendation 6 | Efforts could be made to ensure that CRNs can access substantive posts |
| Recommendation 7 | Clinical research careers could be promoted to student nurses. |
| Recommendation 8 | Student placements with CRNs could be encouraged. |
| Recommendation 9 | Research could be incorporated into clinical nurses' job descriptions |

6.1 Detailed recommendations

Recommendation 1: Efforts are made to establish greater visibility in the clinical areas.

One of the clear issues that can impact on perceptions of CRNs and how they develop relationships with clinical nurses is how visible they are. Some of the CRNs had a physical presence in the unit, which paid dividends with integration and opportune interventions. Conversely, other CRNs were based elsewhere and only spent shorter periods of time in the units. This was linked with difficulty in developing relationships and barriers to engagement. Visibility appeared to be a particular issue for CRF CRNs, so consideration of this group could be a positive development.

Ideally this would involve a physical presence, however other efforts from the research team, or the research and development offices, could use novel means to achieve this (for example, on TV screens containing rolling information on useful details or on PC screensavers). For CRNs who may be reluctant to do this, efforts should be made to encourage this form of engagement.

Recommendation 2: Consideration could be given to adding a 'relationships' component to study intensity tools.

This will allow consideration of time for communication with ward staff and building relationship. The feedback from the CRNs indicated that attention to the time that this takes may be important, especially for non-unit based CRNs, and explicit recognition of this may be useful.

Recommendation 3: A separate uniform for CRNs could be implemented to increase visibility and recognition that the CRN is a nursing role.

There are perennial discussions relating to whether CRNs should wear a uniform. From the discussions with the CRNs in this study, there are differences of opinion. This is made more complex by the presence of the national uniform in Scotland. However, a separate uniform would increase recognition by clinical nurses. It would also ensure that CRNs are not seen to be 'different' in areas where all other healthcare professionals wear a uniform.

Recommendation 4: CRNs could encourage clinical nurses to undertake research and strengthen the link between evidence base and practice

The fourth recommendation may be more problematic to implement. This relates to the perceived relevance to nurses of the research that CRNs are involved in. Similarly, shorter-term studies appeared to be beneficial as often results of studies are not available for a number of years after the practical aspects of the study have concluded. This could be achieved by CRNs taking a more active role in encouraging clinical nurses to undertake nurse-led studies. This would have a number of benefits, including increasing awareness of research, the importance of evidence based practice and the expertise that CRNs have and how they can help.

Recommendation 5: Results from all studies should be actively disseminated to the clinical areas

Dissemination of research findings appeared to be crucial in legitimatising the effort that clinical nurses contribute to research. Some of the CRNs indicated barriers to this including limitations with dissemination methods and the perception that since a long period of time had passed since the studies had been conducted, that there was no value in this. CRNs were also concerned that dissemination of these results would not be of interest to the clinical nurses. However, by taking opportunities to do this, clinical

nurses could gain a deeper understanding of the life cycle of a research project, as well as how the results can improve care. Additionally, it is important to report studies with negative results as these are also important to care developments. As with the initiatives to increase visibility, novel approaches could assist in disseminating results. This could include using social media and novel use of IT (for example, screen savers on ward computers). If resources allow, a newsletter may also be beneficial. Additionally, promotion of patient stories can demonstrate how research can impact on patient care and wellbeing as well as re-enforcing how research applies in the 'real world'.

Recommendation 6: Efforts could be made to ensure that CRNs can access substantive posts

Although not related to the aims of this study, it was clear that the lack of job security and issues with a drop in salary CRNs contractual arrangements were problematic for the CRNs. The consequences of this are that CRNs can feel less secure in their role and they may have ethical concerns related to recruiting patients to maintain funds for employment. It also appears to be having an impact on recruitment to CRN posts. Whilst a drop in salary would be difficult to remedy, there should be greater efforts to ensure that substantive contacts can be offered to the CRN workforce.

Recommendation 7 & 8: Clinical research careers could be promoted to student nurses and placements with CRNs should be encouraged

A number of the CRNs mentioned that they believe that undergraduate nursing programmes do not do enough to prepare student nurses for practical elements of research or how nurses are involved in leading and implementing research. It is recommended that efforts be made to further incorporate practical elements of

research into undergraduate nursing programmes and that substantive or supplementary placements with CRNs are offered to student nurses, wherever possible.

Recommendation 9: Research could be incorporated into clinical nurses' job descriptions

At present, it appears that participation in research is not mentioned in clinical nurses' job descriptions. It is recommended that this be changed to convey to clinical nurses that research is a component of their role and that they should be prepared to participate in this in their role.

The next chapter will reflect on the process followed and discuss the limitations of this study.

Chapter seven - Reflections

7.0 Reflection and reflexion

The doctoral journey can be greatly enhanced by reflection and being reflexive as it can facilitate a deeper understanding of how organisations and groups interact whilst acknowledging the reflector's power and influence (Brookfield 2015). In my own experience, I have found that it can also assist in exploring value, potential bias and my own contribution as a practicing researcher.

Before the study commenced I had envisaged that the interviews would follow the schedule set. However, in practice the discussions were much more organic and the subject of the questions naturally emerged from the discussions. This led to the interviews taking on a more fluid nature, which I was initially concerned about as they may have digressed from the aim of the study. However, in practice it allowed for the CRNs to explore topics that were of importance to them, rather than only topics that I had envisaged would be discussed. Subsequently, other subjects, such as relationships with doctors and clinical nurse specialists and issues related to job security also emerged.

As indicated earlier, I reflected that the CRNs had used metaphors to describe feelings or situations. It occurred to me that this might be a useful way to gain a different insight to aspects of the discussion. Subsequently, I asked the participants to describe a CRN using a metaphor. For some of the CRNs the answer was offered instantaneously, but with others there were long pauses while they considered this question. During some of these pauses there were times that I began to question the usefulness of this request, but all but one of the CRNs offered a response. I was delighted with the reaction as I felt that it gave me an insight into how the CRNs saw their role. Perhaps

I could have asked the CRNs to describe clinical nurses using a metaphor too, I think, on reflection that would have been illuminating. However, this may be a useful component of the next phase of this research.

As indicated in the text, I was disappointed that I did not make a distinction between clinical and nursing teams. If I was to undertake the interviews again, I would definitely make this distinction, because I was more interested in whether the CRNs felt part of the nursing team, rather than the wider clinical team.

This process also made me re-examine my own perspective, allowing me to challenge my own beliefs whilst gaining a deeper understanding of the experiences of others who work in this field.

7.1 Limitations

A limitation of this study is that only CRNs were included. By including information from clinical nurses, their experiences and how they made sense of them, could have also been explored. However, the remit of this research study only allowed CRNs experiences to be sought. As detailed above, a sister research project may be to undertake similar research with clinical nurses. A study examining clinicians' perceptions of research and researchers was conducted recently in Scotland. The results of this have still to be published, but they may offer an insight into the role of the CRN from the clinical nurses' perspective. The findings will also inform the growing body of literature on this topic.

Due to the qualitative methodology, the number of participants included in this study was relatively low. Additionally, the research was solely conducted in Scotland. This could influence the transferability of the findings. However, following examination of

the national and international literature, there is a convergence of experiences that would indicate that these findings would be applicable elsewhere.

Furthermore, the researcher's own interest in this topic may have made the introduction of bias more likely. In order to counter this, in addition to critical input from my supervisors (neither of whom were CRNs, but had a health related academic background), two critical friends provided feedback on the links from emergent patterns to sub-ordinate and super-ordinate themes. In addition, the emergent themes were also used as the basis for a twitter chat, held on the 16th of May 2018. Broadly, the topics from this study were discussed, giving some confirmation that they are relevant to CRN practice. A summary of the twitter chat can be seen in appendix 10.

As indicated in the discussion section. My questions in the interviews failed to make a distinction between membership of clinical and nursing teams. This may have been relevant as a nurse may feel part of a wider clinical team, especially given some of the links with medical staff, but may not feel like a member of the nursing team. This may have impacted on the usefulness of the information divulged by the CRNs.

7.2 Relevance for practice

At the time of writing I feel very attached to this study and the findings; however, there are aspects of this that I think are particularly interesting. The fact that CRNs commented/sympathised with CRF nurses because of the added layer of complexity in their role may have wide-ranging ramifications. Of course it is intuitive to presume that nurses who are not based in a speciality may find doing studies in that speciality more problematic. The number of CRFs in the UK and Ireland has grown exponentially since the first Wellcome Trust CRFs opened in the early 2000s, from an initial five to a current number in 2018 of 45. If the CRNs working in these units are experiencing

significant difficulties when they are conducting outreach studies, then this could reasonably be something that is detrimental to the research that they are conducting.

Also, the perception that some research is harming patients should be addressed. This came out strongly in Zoe's discussion, simultaneously horrifying and annoying her. This could have been an isolated incident, but if some nurses feel that research has taken the set from being encouraged to acceptable, to a nuisance to harming patients, then this is alarming. This is certainly worthy of further exploration.

Chapter eight - Conclusion

8.0 Conclusion

The aim of this thesis was to explore how CRNs make sense of their relationship with clinical nurses. Additionally, the experiences of CRNs in this relationship and how these are established and maintained were also examined.

Ten clinical research nurses from a health board in Scotland were sampled and were interviewed using a semi-structured approach. An interview schedule was devised with a cue questions designed to explore the research questions. However, in practice the discussions in the interviews were more organic in nature with the schedule referred to ensure that all the topics had been explored.

An Interpretative Phenomenological Analysis methodology was used in this study allowing the participants and myself to interpret their experiences to elicit meaningful, rich data.

The rationale for studying this topic emerged from previous work that indicated that the relationship between CRNs and their clinical nursing colleagues may be of significance. This was also reflected in the literature, but had not been systematically explored. These highlighted that this relationship was important in conducting successful clinical research, but also highlighted that difficulties in this relations may lead to CRNs feeling that their value in nursing was in question.

The findings indicated that the relationship with clinical nurses is deemed to be extremely important to CRNs. It highlighted that CRNs understood that clinical care should take precedence and that relationships can be positive. However, the participants also indicated that they experienced negative interactions with clinical nurses, appearing to convey varying degrees of difficulties or resistance. Some CRNs

explored more significant issues; describing feelings of dread or even inferences that research was harming patients.

Following on from this, strategies for establishing and maintaining relationships with clinical nurses were explored. Discussions on this topic included helping clinical nurses, ingratiation, rewards, public relations, use of humour and self-deprecation, dissemination of research results, visibility and the development of a research-friendly policies.

Personal factors also proved to be important to the CRNs. These included the autonomy of the role, job security, justice and the autonomy of the study participants. The CRNs then explored that they felt that there was a perception that their role was easy and that CRNs were not 'real' nurses. Issues of clinical nurses being gatekeepers to the patients were also explored. Interestingly, relationships with other groups also emerged. These were associated to relationships with clinical nurse specialists, doctors and other CRNs.

External factors, such as the research culture, the etiquette in the clinical area, particular issues with CRNs who are not based in units and the importance of engaging with student nurses.

Along with other recent PhDs, reports and publications, it is hoped that this research adds to the understanding of the CRN role and the key groups that they interact with.

The findings of this study will be presented at two conferences soon after submission of this thesis. After these, manuscripts will be submitted for consideration for publication to ensure that salient information from this research enters the public domain.

It is hoped that the findings of this study have some utility and transferability to other healthcare setting where CRNs are employed.

This thesis had the aim of exploring how CRNs make sense of their relationship with clinical nurses. The exploration of this topic has illuminated how this relationship can be positive and other occasions where things could be improved. Both parties have a role in this, with an ultimate aim of improving patient care and enhancing evidence based practice.

8.1 Final comments

This thesis contributes to a growing body of knowledge regarding the expertise and experiences of clinical research nurses. An omission from this picture is the perspective of clinical nurses. Exploring the experiences of clinical nurses will be the next step in this research journey.

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Appendices

Appendix 1 - Executive summaries from previous assessments in doctorate

Executive summary - Advancing Professional Practice

This e-portfolio presents the evidence to fulfil the learning outcomes set out in the Learning Action Plan (LAP) for APPA. The learning outcomes are explored in different documents.

Learning outcome one pertains to the development of the LAP, formulation of the programme specifications and information gathered from peers and external agencies.

The ***second learning outcome*** explores the role, and role development of the CRN. It charts the expansion of the duties performed by the CRN and postulates that this role could become a research leader of the future. This could be achieved by advancing the professional practice of CRNs, whilst examining the educational requirements of this role. The concept of how advanced practice might be conceptualized and the notion of clinical research nursing as a specialty are also examined.

Learning outcomes three and four are presented together to link the increase in university and industry collaboration with the drivers and barriers to this. The motivation of each, in the context of evidence from the literature and the policy infrastructure, is also detailed.

Lastly, ***learning outcome five*** relates to the reflective process of critically examining the learning that has been achieved. It explores the somewhat convoluted path taken to submission of this portfolio and relates it to the personal context and conceptual frameworks to structure the discussion.

This has been a difficult process, but one that has led to a greater understanding of personal approaches to learning, as well as a realisation that the educational needs of the CRN group should be addressed to facilitate the advancement of their own practice.

Throughout the process, it was clear that a number of points required further clarification. Along with the development of the programmes, these will be explored in APPB.

Executive summary - Advancing Professional Practice B

This assessment presents the evidence to fulfil the learning outcomes set out in the Learning Action Plan (LAP) for APPB. Evidence that the learning outcomes have been met is embedded within this portfolio.

The introduction sets the scene and examines how APPA and APPB link together. It also explores the context for some of the content of APPB. Next, there is a critical examination of advanced practice for the clinical research nurse (CRN). It examines issues of role clarity and confusion that remains in terms of the scope of the CRN role.

Following on from this, data from surveys, conference and programme feedback are examined in the context of CRN practice and the educational programmes offered by the student's University. These are processed to draw conclusions as to the contemporary perspective of CRNs in terms of their own role and the educational preparation required for this.

Lastly, there is consideration of potential research questions that could be examined in the research proposal and offers a conclusion to the evidence explored in APPB.

This has been an extremely challenging process, which has led to a greater understanding of my own abilities, and weaknesses, as well as the complexities of defining the exact nature of such a large group of nurses.

Throughout the process, it was clear that a number of points required further clarification. It is anticipated that one of these could be explored in the research component of the Professional Doctorate.

Appendix 2 – Excerpts from reflective accounts

This appendix provides two examples of the reflection that was undertaken. The first excerpt relates to personal reflection on a developing understanding of the experiences of the participants. It also demonstrates how the critical friends were used in this process.

The second excerpt relates to my own wider understanding of the subject, and how that relates to my knowledge and gaps therein.

Excerpt A:

Met with critical friends last week to discuss the selected text from the transcripts and the first version of my interpretation of these. Also caught up with JM separately after this initial meeting.

This was very useful to discuss the emergent patterns and how these may develop into sub-ordinate themes. We also had a very useful discussion about the context that the CRNs find themselves in and how that might impact on their experiences. For example, in terms of the widening scope of the role and issues with the use of short term contracts.

JM raised some very good points about some of the meanings from the quotes selected. Prior to the second meeting with JM, I had re-read the collated quotes and had come to a similar conclusion myself. I had been worried that quotes/interpretations from the CRNs may be mis-interpreted by me in the process of exploring each case. However, I feel that this is part of the progression through the findings; allowing me to identify and challenge my own perspective.

I have been worried about how this would work in practice but am re-assured that this is part of the inductive process of examining the quotes and, simultaneously,

attempting to ensure that my own beliefs do not influence the CRNs interpretations. I think that the proponents of IPA would suggest that this allows exploration of how the individuals make sense of their own experiences. Still, I should constantly be reminding myself that I have to be wary of this.

An example of how my understanding of one of the CRNs interpretation of their experience changed relates to my initial impression that the help that one of the CRNs provided for their PI conveyed some element of subservience. However, on re-reading it was apparent that a fairer reflection on their description indicated that this was a legitimate component of their role in that study. My understanding that reading, re-reading and re-reading again (continuing on even longer in some instances) was a crucial part of the process was confirmed. This led to a deeper understanding of the findings and the methodology.

Except B:

The more I think about this topic, the more it reminds me of an unfinished jigsaw. At present I can see part of the 'picture', but there are still pieces missing. Intriguingly, there are seems to be other jigsaws branching off from the main puzzle. I do wonder where these could take me in the future (perhaps post-doctoral work!). As I write this, I think that there is a direct connection between this and the concept map that was generated in for one of my previous assessments. It facilitates the inter-woven nature of things that can seem unrelated.

Although this is not something that I feel that I have a natural tendency to do, I think that using visual metaphors can be helpful when I am trying to consider complex concepts and using them has helped to crystallise these. The potential for my own bias impacting on the study, being a good example.

The more I think about these, usually when I am out on a run, they feel like staging posts in the in-depth development of my thesis. Using these metaphors also assists in manifesting my 'known unknowns' and understanding my own thoughts. This process helps to explore bias in this context.

I think that outcomes of this discussion with my supervisors allowed me to more accurately articulate my progress through the professional doctorate, detailing where knowns and unknowns were, this allowed me to view the proposal, and the overall thesis, in a much more cohesive way. I'm not sure whether this could be described as an epiphany. However, it did, and does, feel significant. It also has given me more confidence to look beyond the obvious and be more analytical.

Appendix 3 – Review of quality of included studies

Adapted CASP Qualitative checklist

| Reference | Are the results valid? | Is a qualitative methodology appropriate? | Were the methods congruent with the methodology? | Was the recruitment strategy appropriate to the aims of the research? | Was the data collected in a way that addresses the research issue? | Has the relationship between researcher and participants been adequately considered | Have ethical issues been taken into consideration? | Was the data analysis sufficiently rigorous? | Is there a clear statement of the findings? | How valuable is the research? |
|--|------------------------|---|---|--|---|---|--|--|---|---|
| GALASSI A.L. et al. 2014 Clinical Research Education: Perspectives of Nurses, Employers and Educators <i>Journal of Nursing Education</i> 53 1-6 | Yes | Qualitative descriptive approach | Yes – telephone based semi-structured interviews followed up with an <i>off the shelf</i> interactive tool with Deans | Yes -purposive approach to gain perspectives of educators from 26 schools of Nursing in USA. Potential limitations with purposive sampling | Yes - telephone based interviews were used. May have missed non-verbal cues | Unclear – potential limitation | Approved by institutional review board (IRB) | Yes – systematic approach used | Yes | Valuable. Interesting findings relating to the provision of clinical research education |
| HEMINGWAY B., STOREY C. 2013 Role of the clinical research nurse in tissue viability <i>Nursing Standard</i> 27 (24) 62-68 | Yes | Case study | Yes | Yes - Convenience Sampling. Potential limitations with this approach | Unclear – potential limitation | Unclear – potential limitation | Not discussed – potential limitation | Not discussed – potential limitation | Yes | Valuable. Adaptation to CRN role. Boundaries between clinical & CRN role. Cooperation of clinical nurses is key |

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|--|-----|--|---|---|--|---|------------------------------|--|-----|--|
| | | | | | | | | | | Understanding of research & increase cooperation. |
| KUNHUNNY S., SALMON D. 2017 The evolving professional identity of the clinical research nurse <i>Journal of Clinical Nursing</i> 26 5121-5132 | Yes | Exploratory qualitative design | Yes – face-to-face semi structured interviews | Yes – purposive approach to gain experiences of 11 CRNs. Potential limitations with purposive sampling | Yes – Semi structured interviews (including 2 pilot interviews). Adds to trustworthiness & credibility | Unclear - potential limitation | Approved by ethics committee | Yes – Thematic analysis. Data saturation was reached | Yes | Valuable. CRNs as agents of change. Gatekeeping, low priority of research, autonomy, barriers, student nurse role all explored |
| LARKIN M.E., et al 2017 Ethical Challenges experienced by clinical research nurses <i>Nursing Ethics</i> March 1, 1-3 | Yes | Qualitative descriptive approach | Yes - face to face semi structured interviews | Yes – purposive approach to gain perspectives of 12 CRNs. Potential limitations with purposive sampling | Yes - Semi structured interviews | Potential for bias acknowledged by the researchers. Mitigated by the design of the rigour of the research | Approved by IRB | Yes – Thematic analysis. Data saturation was reached | Yes | Valuable. Gatekeeping, identity as a nurse, nurse versus research conflict, CRNs “caught in the middle” |
| LAWTON J. et al 2012 Understanding the outcomes of multi-centre clinical trials: A qualitative study of health professional | Yes | Qualitative descriptive approach – informed by grounded theory | Yes - face to face semi structured interviews | Yes – purposive approach to gain perspectives of 12 CRNs and 9 clinicians. Potential limitations with | Yes - Semi structured interviews | Unclear - potential limitation | Approved by ethics committee | Yes – Thematic analysis. NVivo package was used | Yes | Valuable. Study identified tension between clinical care and research, role blurring of CRNs. |

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|---|-----|-------------------------------|---|--|---|--------------------------------|------------------------------|--|-----|--|
| experiences and views <i>Social Science and Medicine</i> 74 574-581 | | | | purposive sampling | | | | | | |
| RICKARD C.M., et al 2011 Towards improved organisational support for nurses working in research roles in the clinical setting: A mixed method investigation <i>Collegian</i> 18 165-176 | Yes | Mixed methods | Yes – Survey and Semi-structured interviews. Survey had been previously validated | Yes - purposive approach to gain perspectives of 11 CRNs and 1physiotherapist. Potential limitations with purposive sampling | Yes – Survey and semi structured interviews | Unclear - potential limitation | Approved by ethics committee | Yes – Frequencies and percentages were used for the survey and Colazzi's seven step method facilitated thematic analysis | Yes | Valuable. Lack of understanding or respect from nursing colleagues. Need for education was highlighted. Undergraduate education was poor preparation. Autonomy , flexibility and variety in job was seen to be positive. |
| SPILSBURY K., PETHERICK E., CULLUM N., NELSON A., NIXON J., MASON S. 2007 The role and potential contribution of clinical research nurses to clinical | Yes | Qualitative focus group study | Yes – Focus group was appropriate | Yes – Convenience sample of CRNs involved in one clinical trial. Potential limitations with convenience sampling | Yes – Focus groups | Unclear - potential limitation | Approved by ethics committee | Yes - Thematic analysis. NVivo package was used | Yes | Valuable. Problems with role transition to CRN. Potential role conflict, isolation. CRNs gained consent, but not cooperation. |

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|--|-----|--------------------|--|---|--|---|--|--|-----|---|
| trials <i>Journal of clinical nursing</i> 17 549-557 | | | | | | | | | | Motivation was an issue |
| TINKLER L., SMITH V., YIANNAKOU Y., ROBINSON L. 2017 Professional identity and the clinical research nurse: A qualitative study exploring issues having an impact on participant recruitment in research <i>Journal of Advanced Nursing</i> 74 (2) 318-328 | Yes | Qualitative study | Yes - Focus groups were appropriate | Yes - purposive approach to gain perspectives of 19 CRNs. Potential limitations with purposive sampling | Yes – Four Focus groups were used to gather data | Yes – account was taken of the researcher's role in the study. Strength of this study | Yes- Approved by University and Research and Development Department procedures | Yes – rigorous approach used | Yes | Valuable. CRNs on outskirts of clinical team. Can be 'cuckoo in the nest'. Seen to be a nuisance. CRN role has emotional labour. Sales skills. Issues with professional identity |
| Stobbart L. 2012 <i>Conducting randomised controlled trials in an acute stroke unit: an ethnographic study</i> PhD Thesis Newcastle University | Yes | Ethnographic study | Yes – ethnographic methods were employed | Yes – convenience sample in acute stroke unit. Potential limitations with convenience sampling | Yes – interactions, field notes and interviews with 16 staff were used | Yes – Researcher's role in the process was considered | Yes – ethical approval was obtained | Yes – process was followed. This facilitated rigour and auditability | Yes | Valuable. Empirical evidence and detailed account of pragmatic issues encountered were presented. Clinical care and research separated. Placement of research nurses |

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| | | | | | | | | | | <p>within the clinical environment may promote transparency and greater understanding of their role, whilst simultaneously demystifying research concepts.</p> |
| <p>JONES H. 2017 <i>Exploring the experience of Clinical Research Nurses working within acute NHS trusts and determining the most effective way to structure the workforce: A mixed methods study</i> PhD Thesis King's College London</p> | Yes | Mixed methods (Survey followed up by focus groups and semi structured interviews) | Yes – Phase I comprised a survey and Phase II included case studies/ interviews | Yes – participants were recruited from throughout the UK | Yes -national survey (76 respondents), 14 interviews and 4 focus groups | Yes | Yes | Yes | Yes | <p>Valuable.</p> <p>The effect of reviewing CRN workforce structures was found to have a statistically significant effect on recruitment into interventional studies. Lead CRNs have an important role in providing leadership and</p> |

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|--|--|--|--|--|--|--|--|--|--|---|
| | | | | | | | | | | <p>direction for the workforce and a link to clinical</p> <p>nursing colleagues. Research delivery can be difficult and often overlooked as it is not perceived as a priority. The level of support and understanding from clinical nursing colleagues impacts CRN experience..</p> |
|--|--|--|--|--|--|--|--|--|--|---|

Review checklist

| Reference | Did the review address a clearly focused question? | Did the authors look at the right type of papers? | Do you think that all important, relevant studies were included? | Did the review's authors do enough to assess quality of the included studies? | If the results of the review have been combined, was it reasonable to do so? | What are the overall results of the review? | How precise are the results? | Can the results be applied to the local population? | Were all important outcomes considered? | Are the benefits worth the harms and costs? |
|---|---|---|---|---|--|---|------------------------------|---|---|---|
| Bell J. 2009 Towards clarification of the role of research nurses in New Zealand: a literature review <i>Nursing Praxis in New Zealand Nursing Praxis in New Zealand</i> March 1, 2009 | Yes – To clarify the role and position of research nursing | Yes | Yes – appears to be a comprehensive search | This was not detailed | N/A | That a clear career structure and educational support should be developed for research nurses. Research nurses make an important contribution to research | N/A | Yes, though the results may be somewhat out-dated | N/A | N/A |
| Brinkman-Denney S 2013 An international comparison of the clinical trials nurse role | Yes – to compare the role of the CRN in different countries | Yes | Could have been more comprehensive, but a sufficient range of articles were | This was not detailed | N/A | Collaboration is an important competency for clinical trials nurses | N/A | Yes, though the publication is largely contextualised in the USA. | N/A | N/A |

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|---|---|--------------|---------------------------------------|-----------------------|-----|---|-----|--|-----|-----|
| <i>Nursing Management</i> 20 (8) 32-40 | | | included to draw relevant conclusions | | | | | Also, some of the source articles are more than 10 years old | | |
| GORDON C 2008 Exploring the new specialty of clinical research nursing <i>Nursing Times</i> 104 (29) 34-35 | Yes – to gain a deeper understanding of the specialised role of the CRN | Not detailed | Unclear | This was not detailed | N/A | Identification of specialist role of CRN. Career pathways an education also identified as being important | N/A | Yes, though the results may be somewhat out-dated | N/A | N/A |

Survey checklist

| Reference | Did the study address a clearly focused question/ issue? | Is the research methodology appropriate for answering the research question? | Is the method of selection of the subjects clearly described? | Could the way that the sample was obtained introduce bias? | Was the sample of subjects representative with regard to the population to which the findings will be referred? | Was the sample size based on pre-study considerations of statistical power? | Was a satisfactory response rate achieved? | Are the measurements likely to be valid and reliable? | Was statistical significance assessed? | Are confidence intervals given for the main results? | Could there be confounding factors that haven't been accounted for? | Can the results be applied to your organisation? |
|---|--|--|---|--|---|---|--|---|--|--|--|--|
| Bevans M. et al 2011 Defining clinical research nursing practice: results of a role delineation study <i>Clinical Translational Science</i> 4 421-427 | Yes – to describe the frequency and perceived importance/ delineation of activities of nurses | Yes – non-experimental, cross sectional design | Yes – convenience sample. | Yes - Potential limitations with convenience sampling | Unclear | No | Yes (70% - 288 responses) | Yes – tool had been previously validated | Yes | Yes | Possibly – However, the very specific work situation at this site might be important | Yes, with consideration that these results reflected the situation in the NIH Clinical Center. |
| CATANIA G., PIORE I., BERNARDI M., BONO L., CARDINALE F., DOZIN B. 2011 The role of the clinical trial nurse in Italy <i>European Journal of Oncology</i> | Yes – to assess the role of the clinical trials nurse and to evaluate the quality of job performance | Yes - descriptive | Yes – national sample in Italy | No – total population of oncology CTNs were approached | Yes – though the sample size was relatively low | No | Yes (88% - 30 responses) | Yes – part of process was to validate questionnaire | Yes | No | Possibly – unaccounted confounding factors may have influenced the results | Yes, with consideration that these results reflected the situation in Italy |

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|---|---|----------------------|--|---|--|-----|---|---|--|-----|---|--|
| <i>Nursing 16</i> 87-93 | | | | | | | | | | | | |
| EASTWOOD G.M., ROBERTS B., WILLIAMS G., RICKARD C.M. 2012 A worldwide investigation of critical care research coordinators' self-reported role and professional development priorities: the winner survey <i>Journal of Clinical Nursing</i> 22 (5- 6) 838-47 | Yes – to describe the self-reported role and professional development priorities of research coordinators | Yes - descriptive | Yes – as no overall database is available a snowball method was used | Possibly – the researchers would not be able to ascertain this | Unclear – study had 80 respondents, but unable to say whether this is a representative sample | N/A | Unclear (80 responses) | Unclear – questionnaire may not have been previously validated | No | No | Unclear – due to the variety of roles and contexts that the coordinators were working in, these could not be identified. | Yes, coordinators in this study described similar experiences to local nurses |
| HILL G., MACARTHUR J. 2006 Professional issues associated with the role of the research nurse <i>Nursing Standard</i> 7 (20) 41-47 | Yes – to explore range of issues relation to CRN role | Yes - descriptive | Yes – convenience sample. | Yes - Potential limitations with convenience sampling | Unclear | N/A | Moderate (48% [50 responses] and 66% [72 responses]) | No – questionnaires had not been previously validated | No | No | Possibly – unaccounted confounding factors may have influenced the results | Yes – Study was conducted locally though is 12 years old |
| JONES H. 2017 <i>Exploring the experience of Clinical</i> | Yes – to explore how the CRF workforce is | Yes - descriptive | Yes – national sample | No – though not all of the organisations | Yes | N/A | Yes (83% 143 responses) | Yes – validated tool | Yes – descriptive and inferential | Yes | Possibly – unaccounted local confounding factors may | Yes – results are directly relevant locally |

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| <i>Research Nurses working within acute NHS trusts and determining the most effective way to structure the workforce: A mixed methods study PhD Thesis King's College London</i> | currently organised | | | identified CRNs (144 out of 173) | | | | | statistics were used | | have influenced the results | |
| MACARTHUR J., HILL G., CALLISTER D. 2014 Professional issues associated with the clinical research nurse role <i>Nursing Standard</i> 29 (14) 37-43 | Yes – to ascertain development of the CRN role over a 10 year period | Yes - descriptive | Yes – convenience sample. | Yes - Potential limitations with convenience sampling | No | N/A | Moderate (65.9% 108 responses) | Yes - validated tool, though some additional questions were added | No | No | Possibly – unaccounted confounding factors may have influenced the results | Yes – results are directly relevant locally |
| MORI C., MULLEN N., HILL E.E. 2007 Describing the role of the clinical research nurse <i>Research</i> | Yes – to describe the role of the clinical research nurse | Yes - descriptive | Yes – national sample | No – though it is unclear if all clinical research centers had been included | Yes | N/A | Unclear (109 responses) | Unclear | Yes | No | Possibly – unaccounted local confounding factors may have influenced the results | Yes – Study results are relevant, though is 11 years old |

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|---|---|--------------------------------|---|----|---|-----|--|----------------------------|-----|----|--|---|
| Practitioner 8 (6) 220-228 | | | | | | | | | | | | |
| RICKARD C.M., et al 2011 Towards improved organisational support for nurses working in research roles in the clinical setting: A mixed method investigation <i>Collegian</i> 18 165-176 | Yes – to explore experiences of nurses employed in research positions | Yes – cross sectional approach | No – elements of snowball approach, but exact process is unclear | No | No - cannot be deemed to be representative as the total population is unknown | N/A | Unclear as total population is unknown | Yes – validated tools used | Yes | No | Possibly – unaccounted confounding factors may have influenced the results | Yes, with consideration that these results reflected the situation in Australia |
| RICKARD C.M., ROBERTS B.L., FOOTE J., MCGRAIL M.R. 2007 Job satisfaction and importance for intensive care unit research coordinators: results from binational survey <i>Journal of Clinical Nursing</i> 16 1640-1650 | Yes – to ascertain job satisfaction of clinical research coordinators | Yes – cross sectional approach | Yes – co-ordinators identified from New Zealand and Australian database | No | Yes – for limited population | N/A | Yes (71% 49 responses) | Yes – validated tools used | Yes | No | Possibly – unaccounted local confounding factors may have influenced the results | Yes, with consideration that these results reflected the situation in New Zealand and Australia |

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|--|---|--------------------------------|--|----|------------------------------|-----|-------------------------------|----------------------------|-----|----|--|---|
| ROBERTS B., et al 2011 The intensive care research coordinator position in Australia and New Zealand: Self-perception of professional development priorities and “best” and “worst” aspects of the position. A cross-sectional web-based study <i>Intensive and Critical Care Nursing</i> 27 129-137 | Yes – to map ‘best’ and ‘worst’ aspects of research coordinators role | Yes – cross sectional approach | Yes – coordinators identified from New Zealand and Australian database | No | Yes – for limited population | N/A | Moderate (54% - 56 responses) | Yes – validated tools used | Yes | No | Possibly – unaccounted local confounding factors may have influenced the results | Yes, with consideration that these results reflected the situation in New Zealand and Australia |
| ROBERTS B., RICKARD C., FOOTE J., MCGRAIL M 2006 The best and worst aspects of the ICU research coordinator role <i>Nursing in Critical Care</i> 11 (30) 128-135 | Yes – to map ‘best’ and ‘worst’ aspects of research coordinators role | Yes – cross sectional approach | Yes – coordinators identified from New Zealand and Australian database | No | Yes – for limited population | N/A | 71% - 49 responses) | Yes – validated tools used | Yes | No | Possibly – unaccounted local confounding factors may have influenced the results | Yes, with consideration that these results reflected the situation in New Zealand and Australia |

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|--|---|--------------------------------------|--|----|---|-----|---|-------------------------------|-----|----|---|---|
| SCOTT K., WHITE K., JOHNSON C., ROYDHOUSE J.K. 2012 Knowledge of skills of cancer clinical trials nurses in Australia <i>Journal of Advanced Nursing</i> 68 (5) 1111-1121 | Yes – development and testing knowledge and skills | Yes – cross sectional approach | No - elements of snowball approach, but exact process is unclear | No | No - cannot be deemed to be representative as the total population is unknown | N/A | Unclear as total population is unknown | Yes – validated tools used | Yes | No | Possibly – unaccounted local confounding factors may have influenced the results | Yes, with consideration that these results reflected the situation in Australia |
| SMITH O.M. et al 2015 Nurse Research experiences and attitudes toward the conduct of intensive care research: a questionnaire study <i>Critical Care Medicine</i> 44 (1) 153-161 | Yes – to characterise ICU nurses’ experiences, work areas & attitudes towards clinical research | Yes – cross sectional approach | Yes – clear description provided | No | Yes – sample is representative | N/A | Moderate (56% - 483 responses) | Yes – validated tools used | Yes | No | None identified | Yes, with consideration that these results reflected the situation in Canada |

(from CEBMa center for evidence based management <https://www.cebma.org/> and CASP checklists <https://casp-uk.net/casp-tools-checklists/>)

Appendix 4 – Interpretative qualitative analysis evaluation guide

Acceptable

The paper meets the following four criteria:

- Clearly subscribes to the theoretical principles of IPA: it is phenomenological, hermeneutic and idiographic.
- Sufficiently transparent so reader can see what was done.
- Coherent, plausible and interesting analysis.
- Sufficient sampling from corpus to show density of evidence for each theme:
N1–3: extracts from every participant for each theme;
N4–8: extracts from at least three participants for each theme; and
N > 8: extracts from at least three participants for each theme + measure of prevalence of themes, or extracts from half the sample for each theme.

Overall the paper is judged sufficiently trustworthy to accept for publication and include in a systematic review.

Caveats

Compensation. Evidence base and interest factors considered together so that, e.g., a paper with particularly interesting data may gain compensation for a less than ideal evidence base. Partial acceptability. A paper may be deemed acceptable if it has partial but discrete pockets of acceptable, e.g.,

1. Paper may present four themes, two of which are interesting and well evidenced while two of them are not. In this case, the paper can be considered acceptable as the two good themes make a sufficient contribution in their own right.
2. Paper may have number of themes but evidence each with data from the same single participant. This paper may be considered acceptable if the account of the individual is sufficiently coherent that it can be read as an interesting idiographic case-study.
3. Paper may present data from two participant groups, e.g., males and females and be deemed acceptable for one participant group but not the other.

Safe or borderline? A paper showing sufficient sampling as described above is deemed safe.

A paper with a sample over eight with extracts from enough participants to illustrate variation but without detail of prevalence or enough evidence of density of themes is deemed borderline. See text for more details.

Unacceptable

The paper fails on one of the four criteria for acceptable. It may be:

- not consistent with theoretical principles of IPA;
- insufficiently transparent for reader to see what was done;
- not of sufficient interest; and
- poorly evidenced.

Predominantly what lets a paper down is the poor evidence base. Typical ways this can occur:

- large number of descriptive/superficial themes from a large number of participants;
- each theme has short summary and one or two extracts without interpretation;
- insufficient extracts from participants to support the themes being illustrated;
- no explanation for how prevalence of the themes was determined; and
- analysis is crude, lacks nuance.

Overall the paper is not trustworthy and would not be judged acceptable for publication.

Good

Paper must clearly meet all the criteria for acceptable. It then offers these three extra things:

- well focused; offering an in-depth analysis of a specific topic;
- data and interpretation are strong; and
- reader is engaged and finds it particularly enlightening.

Overall the paper could be recommended to a novice as a good exemplar of IPA.

Smith (2011a page 17)

Appendix 5 - Linkage between emergent patterns and sub-ordinate themes

| Emergent patterns from interviews | Sub-ordinate theme |
|---|---|
| <ul style="list-style-type: none"> • Courtesy and 'guest' status • Understanding routine – 'knowing' • Etiquette • Fly on the wall • Reciprocity • Research delaying care | <ul style="list-style-type: none"> • Access |
| <ul style="list-style-type: none"> • Other CRNs • Clinical nurses • Taking opportunities to teach • Dissemination of results • Career opportunities • Educational courses for CRNs | <ul style="list-style-type: none"> • Providing education |
| <ul style="list-style-type: none"> • Doctors • Clinical Nurse Specialists • Clinical Nurses • Who does the CRN 'need'? | <ul style="list-style-type: none"> • Friend or Foe? |
| <ul style="list-style-type: none"> • Clinical culture • Barriers • Negative culture • Lack of value of CRN role and research • CRN leadership • Research culture • Use of acronyms • Ward etiquette | <ul style="list-style-type: none"> • Internal/external factors |
| <ul style="list-style-type: none"> • Rapport • Burnout • Gatekeeping • Doctors (positive or negative?) • Teamwork • Corralling staff • Pressure from PI • Start relationship on right footing • Associated with doctors • Reversal of dynamic with patients • More resistance from senior clinical nurses • Ingratiation • Black-listing • Partial member of team • Value • Token economy • Barriers • Clinical nurses unconsciously unhelpful • Paternalism | <ul style="list-style-type: none"> • Interactions |

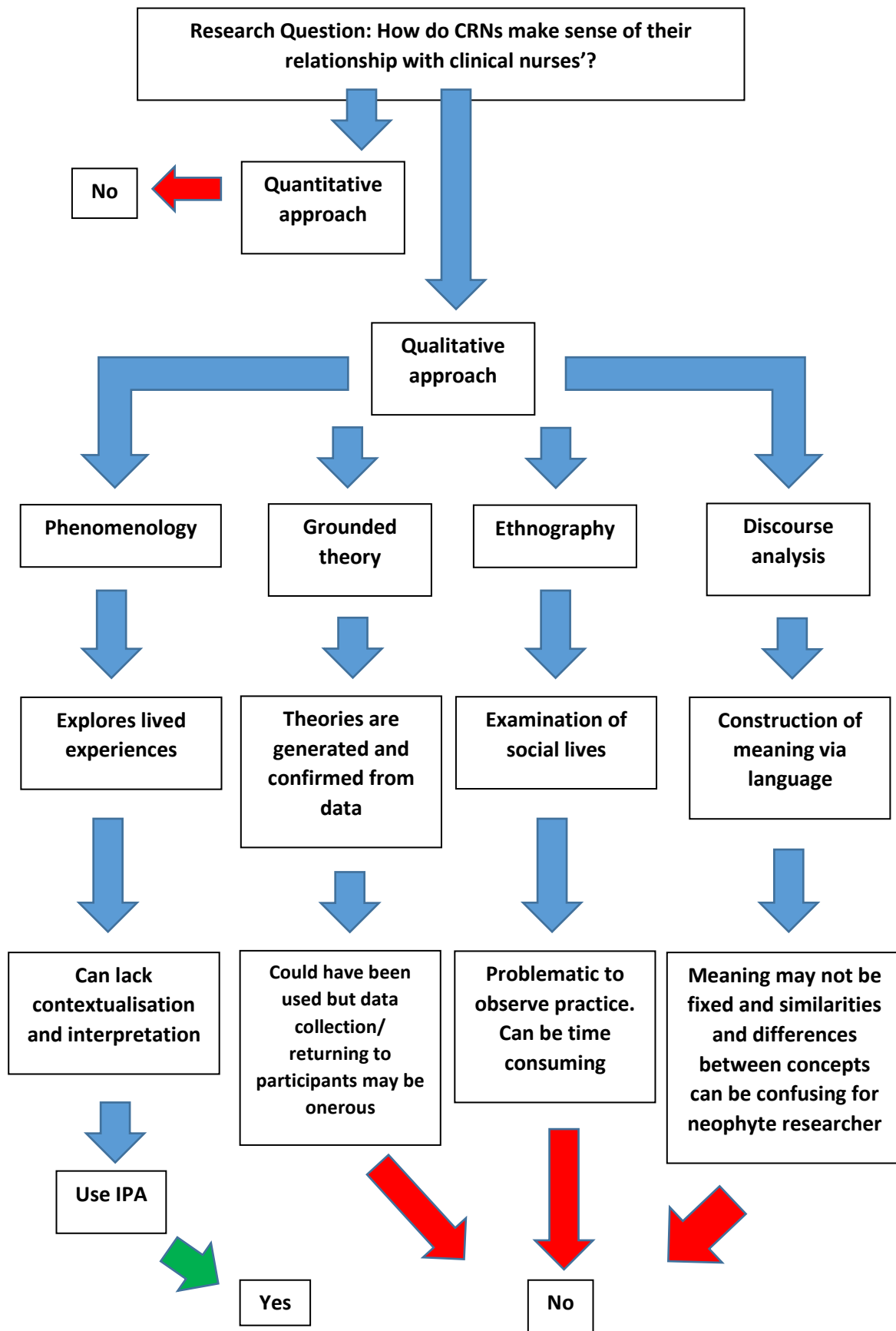
| | |
|---|---|
| <ul style="list-style-type: none"> • Research is positive when there are no treatment options • Subconscious gatekeeping • Part of the team (clinical or nursing?) • Credibility with the PI • CRN as gatekeeper • Part of team, but still kept waiting • Research being labelled ('Aliens') • Tolerance of CRN | |
| <ul style="list-style-type: none"> • Handmaiden • Lack of value of role • Resentment of CRNs autonomy • CRN role is easy • Not 'real' nurse • Elitism • Swanning around • Clinical nurse specialists (CNS) questioning credibility • Patients either see CRNs as nurses OR doctors • CNSs envious of CRNs time • Perception of CRNs is improved when studies are seen to be relevant • Perception of CRNs is improved when studies are shorter-term • Stereotype of CRN • Burden • CRN as 'other' • Research is delaying care • Research is harming patients | <ul style="list-style-type: none"> • Perceptions |
| <ul style="list-style-type: none"> • Positivity in developing new treatments • Patient care comes first • Confidence in role • Ethical principle of justice • Overly: nice/polite/subservient/helpful... • Over and above • Making effort • Ethics • Advocacy • Reciprocity • Charm offensive • Self-deprecation • Humour • CRNs actions potentially perpetuating perception of research • Research or specialism knowledge first? • Gaining knowledge | <ul style="list-style-type: none"> • Philosophy |

| | |
|---|---|
| <ul style="list-style-type: none"> • Novice | |
| <ul style="list-style-type: none"> • Clinical Research Facility (CRF) nurses have less autonomy • CRF nurses have fewer feelings of ownership of studies • Part of team/not part of team • More difficult for CRF nurses to know ward routine/etiquette • In other units, CRNs can be out of comfort zone • In other units, can cause anxiety/feel exposed • Job title is important • Basic role in CRF (good 'breeding' ground) | <ul style="list-style-type: none"> • CRF nurses |
| <ul style="list-style-type: none"> • Autonomy • Ownership of study • More senior CRN = less patient contact • Agents of change • Promotion of EBP • Educators • Promote CRNs as job opportunity • Promote nursing research | <ul style="list-style-type: none"> • Scope of role |
| <ul style="list-style-type: none"> • Recruitment • Job (in)security – is NHS or University better? • Timescales • Impotence • Having to chase people • Lack of recognition • Frustration • Socially ostracised • Lone CRN = isolation • Help is one way process • Negativity • Self-doubt of impact • CRN role is not financially attractive • Otherness • Workload • Anxiety of unfamiliar • Not belonging • Resistance • Guilt • Anticipating unpleasantness • Feeling exposed | <ul style="list-style-type: none"> • Stress |
| <ul style="list-style-type: none"> • Culture • Research infrastructure • Ingratiation | <ul style="list-style-type: none"> • culture |

| | |
|---|--|
| <ul style="list-style-type: none"> • Permission • Understanding routine • Difficult nurses • Black-listing • Resistance • Lack of understanding of objectives | |
| <ul style="list-style-type: none"> • Participation is positive for patients • Research not valued • CRN not valued • Helping out • Social capital • Default position = lack of trust • Value increases with relevant/short-term studies • Value increases if CRN can demonstrate impact of role/research • Self-doubt of own value • Financial value of research to NHS poorly understood • CRN perception that they are 'pretend' nurses • CRNs may be complicit | <ul style="list-style-type: none"> • Value |
| <ul style="list-style-type: none"> • Making point of going to staff room • Having a presence vs under the radar • Socially ostracised • PR/sales • Demonstrably different • Uniforms – positive or negative? • Time • Dissemination • (In)visibility • Consequences of a self-contained CRF | <ul style="list-style-type: none"> • Visibility |
| <ul style="list-style-type: none"> • Ingratiation • Helping out • Prepared to be firm/confident • Fitting in • Brave • Having 'agreement' allowing access • Subtle communication techniques • PR/sales • Giving clinical nurse gatekeeper role • Dynamism • Understanding routine • Link nurses • Being proactive • Willing to be 'used & abused' • Charm offensive | <ul style="list-style-type: none"> • Ways to engage |

| | |
|--|--|
| <ul style="list-style-type: none"> • Supporting other CRNs • Honesty • Reciprocity • Targeted approach • Not wanting to be a burden/nuisance • CRN as gatekeeper • Uniform as armour • Uniform allowing access • Uniform separating CRNs from nursing • Quid pro quo • Humour • Apologising • Thanking for no reason • Asking when not necessary • Deferential • Overt subservience • Undermining importance of research • Seeking permission • Undertaking clinical duties | |
|--|--|

Appendix 6 – Flow diagram of methodological decision making process



(Parahoo 2006, Bryman 2008 and Brown 2009)

Appendix 7 – Participant information sheet

How do Clinical Research Nurses (CRNs) make sense of their relationship with clinical nurses?

Invitation and brief summary

My name is Gordon Hill and I am a professional doctorate student from the School of Health Sciences at Queen Margaret University in Edinburgh. As part of my course, I am undertaking a research project for my doctoral thesis.

The title of my project is: How do CRNs make sense of their relationship with clinical nurses?

This study will explore the experiences that clinical research nurses have in working with ward/clinic-based nurses. This is important because we do not know much about these interactions and gaining a deeper understanding of these relationships may help to facilitate closer working between researchers and clinical staff.

The findings of the project will be useful to help to strengthen the relationship between CRNs and clinical nurses and also to help to ensure that the successful implementation of research is maximised.

I am looking for clinical research nurses with the following attributes to participate in the project.

Clinical Research Nurses:

- Primary employment as CRN (NHS band 5/equivalent or above)
- Engagement with clinical staff to undertake duties
- Currently working either in a research team or directly with a principal investigator

What's involved?

If you agree to participate in the study, you will be asked to participate in one interview, lasting between 1-2 hours. I will ask a series of question in this interview. You do not need to answer any question that you do not want to. You will not be asked to explain your reason for this.

In addition, you will be free to withdraw from the study at any stage and you would not have to give a reason.

What would taking part involve?

The interview should take approximately 1-2 hours. In this you will be asked about your experiences of working relationships between clinical nurses and clinical research nurses.

All identifiable information (for example consent forms) and paper based records will be kept in a locked filing cabinet. All participants will be identified by a number, and not by name. The interviews will be audio recorded and transcribed. Any electronic data will be kept on a password protected computer. Only the researcher will have access to your information.

Some direct quotes from the interviews will be used to illustrate the themes that emerge from this research. In these cases all names and other identifiable information (e.g. workplace) will be removed, to maintain your anonymity.

Some anonymised excerpts from the interviews may be shared with supervisors and others to ensure that the data is being interpreted correctly.

Other than in findings and publications, the data will not be shared.

What are the possible benefits of taking part?

There are no anticipated direct benefits of taking part in this study.

What are the possible disadvantages and risks of taking part?

It is often difficult to anticipate any potential disadvantages in taking part in qualitative research, such as this study. It is possible that you may feel uncomfortable discussing some of your experiences. This will be handled sensitively by the researcher and you will be able to take a break, or discuss this with someone else, if you want to. All discussions will be anonymised, so it will not be possible to link the findings back to you.

Other supporting relevant information

All data will be anonymised. Your name will be replaced with a participant number, and it will not be possible for you to be identified in any reporting of the data gathered.

The results may be published in a journal or presented at a conference or online in a doctoral thesis library.

If you want to stop your participation in the study, you can do this at any time. You do not need to give any reason for this.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact Dr Juliet MacArthur. Her contact details are given below.

If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please now see the consent form.

Contact details of the researcher

Name of researcher: Gordon Hill

Address: Division of Nursing,
School of Health Sciences
Queen Margaret University, Edinburgh
Queen Margaret University Drive
Musselburgh
East Lothian EH21 6UU

Email / Telephone: 88005159@qmu.ac.uk / 0131 474 0000

Contact details of the independent adviser (note that the independent adviser cannot be a member of your supervisory team)

Name of adviser: Dr Juliet MacArthur

Address: Chief Nurse Research & Development
NHS Lothian
Waverley Gate
2-4 Waterloo Place
Edinburgh

Email / Telephone: juliet.macarthur@nhs.net / 0131 537 4070 (ext 34070)

Appendix 8 - Example of data analysis

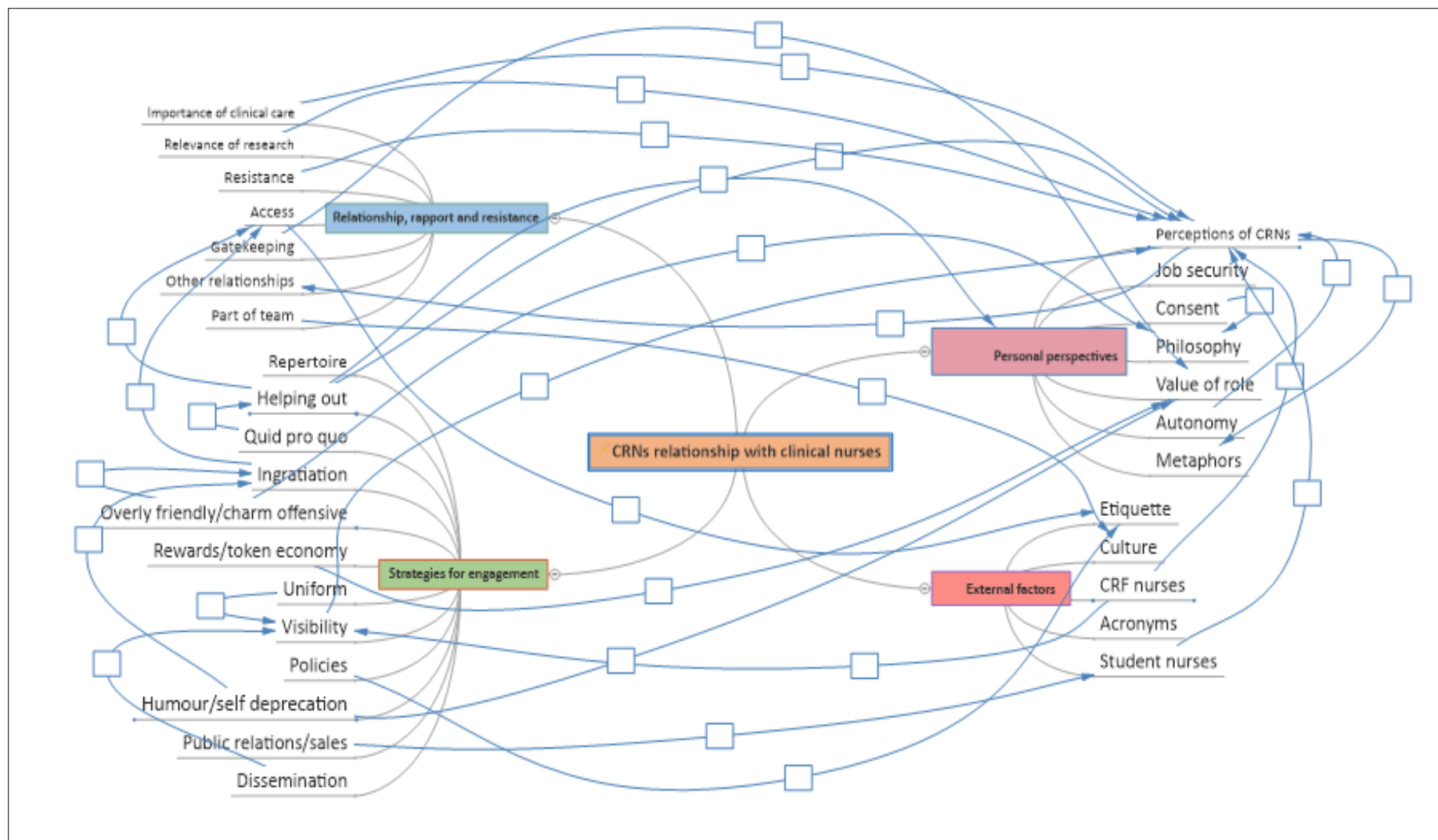
| | | | |
|---|---------|---|---|
| Does that make sense? | | | |
| [In the NHS] it's much more insidious, because people are suspicious and people are overworked and, yeah, it's like what we were talking about earlier about the NHS culture of <i>Everyone is swinging the lead, until it's proven that they are not.</i> | 228-230 | Inherent negativity in the NHS Culture – implications for clinical nurses and research | Negative culture |
| It's just a fight with the NHS sometimes | 243 | Research not understood/valued | |
| Again, that's something that I find really interesting, in my last job I was in the wards, frequently, so you get to know the staff and they get to know you, and they start referring and you walk in it's "Hi, how are you?" and that's because they see you and they think "that patient might be suitable for you". Emm, there is no interaction with the clinical nurses at the moment. That may change, but for all the plans and ethos to dovetail care and research in the NHS, it's not. I have no idea who any of the clinical nurses are. If I needed, you know, advice. I would go to a medic, that I should be able to go to a nurse. Clinical nurses should be able to go to CRNs and see what we are doing. Then, they could look out for potential participants for us. | 246-253 | Frustration with lack of contact with clinical nurses on the wards | Socially ostracised by job |
| If I needed, you know, advice. I would go to a medic, that I should be able to go to a nurse. Clinical nurses should be able to go to CRNs and see what we are doing. Then, they could look out for potential participants for us. | | Why good some places + not other, clinical nurses could help with recruitment Prob because they have more @ expertise ?Stronger links with medics. Lack of relationship with clinical nurses makes job harder | - approach? - culture? - personal approach? ... Associated with medical staff Can't assume that from this possibly lead to perception though |
| Visibility is very much an issue, oh yeah | 259 | Visibility is an issue | |
| by the time someone has work for a couple of years once they have qualified, they are doing 12.5 hours shifts, they have got 4 days off a week, they've got their unsocial hours pay, they've got a permanent contract. Where is the motivation to give all that up, to take a 1 year contract on less pay mon-fri? | 278-281 | Problems attracting nurses into Clinical Research Nursing Job insecurity Less pay | Recruitment problems Job insecurity |

Check again. Might be more in surround text.

Appendix 9 – Examples of metaphors used by a participant

| | | | |
|---|---------|---|---|
| follow through with the study. Otherwise you are not respecting the wishes of the person who gave consent, to have that opportunity. You to just put the armour on [laugh]. | | Sometimes have to be strong arm our | Have to be firm |
| Well, sometime you might go back to the nurse and apologise afterwards. It works both ways and they might be "Oh, sorry about earlier". I think it is about respecting each other and being part of the team. | 279-281 | Mutual respect • Maintaining relationship | Even when things haven't gone well, can talk about it later |
| You feel like a fly on the wall some times | 280 | Metaphor | Fly on the wall |
| The one thing that popped into my head. Being a research nurse in the unit you develop a wall or a skin to what is happening. I think I was taking a step back from that as a research nurse. That also opens you up to actually seeing what is going on. Not that it is more or less upsetting, but you are more aware of situations. When you are in it you build up a wall. When you step back that goes. That is something we talk about in the team. You must have built up a hard front . It's like you have stepped back so you are more open to the tragedy that can happen in a ward. It would be interesting to know how other research nurses feel about that. Like A&E, when they are not in a clinical nursing role. I wonder if they are more affected than before. | 281-288 | More detached as a CRN, but conversely more upset well things go back in clinical setting Interesting contradiction Metaphors - protection - unseen observation why? | CRNs can see the bigger picture Can be upsetting |
| Sometimes speaking to relatives they open up about other things. Sometimes it is just someone who has the time, the clinical nurse might not have that time. | 307-308 | CRNs have more time time for relatives | Time |
| Band 7, though none of our research nurses are anything less than a band 6. You know you could have a band 6 research nurse and not have a clue what you are doing, whereas a band 5 in the CRF might be highly skilled. I think it is partly to encourage people into those jobs. I think I dropped £300 a month when I became a research nurse. If you couldn't offer at least a band 6 you wouldn't get people in the jobs...the length of the contracts too and fixed term contracts...I think it is quite an issue for research nursing. The last time we had a | 310-317 | | Loss in income as CRN Job insecurity |

Appendix 10 - Concept map linking findings



Appendix 11 – Metaphors for CRN role and explanations given for choice

| Name (pseudonym) | Metaphor | Interpretation |
|---------------------|-------------------------------|---|
| Tim | Swan | <p>“because you need to glide into that clinical area. Be absolutely elegant and perfect with everyone that you are talking to and make them look like they are the most important person. Be it the nurse, the doctor or the patient. But actually you have shed loads of things that you need to be doing, so just because the patients come up at that certain time, means you are going to have to miss your meetings, you are going to have to do your following ups at a different time, but you still have to go in, perfectly calm, glide in paddling away under the water”</p> |
| Tina | <p>Bird</p> <p>Detectives</p> | <p>“Movement - we go from one place to another we embark people on a journey with us.”</p> <p>“Because I feel we are always looking for something, sometimes we have bits of the puzzle and the challenge is to complete this puzzle by searching and finding the other parts.</p> <p>We have to be alert to any kind of information,</p> <p>Confidentiality ...</p> |

| | | |
|-------|---------------------------|---|
| | | A simple task like looking for patient's notes could be a challenge! as they can be anywhere and we have to think of all the options and potential places those notes can be; this is just a basic example." |
| Janet | Chimpanzee Vulture | "Intelligent, ability to learn new skills, inquisitive/ curious mind, caring towards others in the chimpanzee community, flexible, strong willed, doesn't take itself too seriously, good sense of humour!" |
| Helen | Cuttlefish | "They can alter their skin for both camouflage and conspicuous displays. Sometimes it pays to go unnoticed, sometimes you need to be very visible. We need to read and adapt quickly to different clinical situations and atmospheres. We need to be the right nurse for that situation, to achieve our research goals. Making ourselves, our approach, our behaviour appropriate for each environment so we can get what we need effectively while causing as little disruption and generating as little rancour as possible. Sometimes we need to charm other staff, doing colourful displays to please and entertain, coaxing the co-operation we need. At other times it is best to go almost unnoticed, blending in, disturbing no one. Given the right combination, research nurses and clinical staff get along very well and can be of use to one another." |
| Andy | Spider | "Spiders build webs (like a network) through which they receive information. There is a pattern to the web - a sequence (or protocol). The web will 'catch' potential participants |

| | | |
|-------|-----------------------------|--|
| | | and the spider can then make their move.” |
| John | Florence Nightingale’s lamp | “To brighten the way” |
| Zoe | Clipboard | “CRNs are always seen with them” |
| | Dog | “Happy, loyal and try to please” |
| Katy | None given | - |
| Peter | Octopus | “a research nurse is a highly adaptive and flexible individual with many skills and problem solving abilities” |
| Sarah | Snake | “in that sneaky way that you sometimes have to work stealthily to get things Moving/done.” |
| | Octopus | Multi-tasking, camouflage and being able to disappear in a cloud of ink! |

Appendix 12 - Excerpts from twitter chat

This appendix summarises key discussions from a twitter chat held on the 15th of May 2018. The first section contains analytics from the chat and the second section details the questions and selected responses.

Section 1 - Analytics

The Numbers

653.773K Impressions

458 Tweets

69 Participants

229 Avg Tweets/Hour

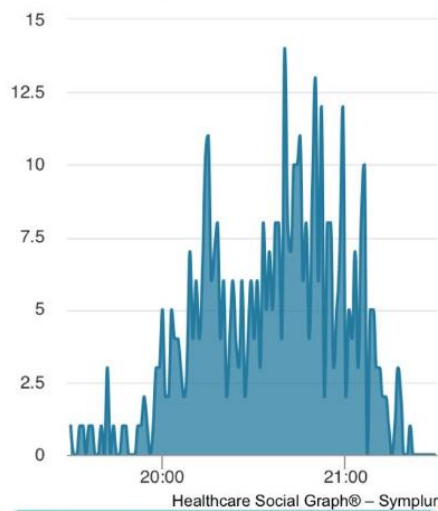
7 Avg Tweets/Participant

Tweet











Like

Twitter data from the #whywedoresearch hashtag from Tue, May 15th 2018, 7:30PM to Tue, May 15th 2018, 9:30PM (Europe/London).











Tweet Activity on #whywedoresearch











Top 10 by Tweets

| | | |
|---|------------------|----|
|  | @Irish_RNN | 76 |
|  | @keeling_michael | 57 |
|  | @GordonHill1 | 53 |
|  | @TinkleLin | 43 |
|  | @sharon_kempson | 30 |
|  | @IACRNUKandIRE | 30 |
|  | @uoscares | 16 |
|  | @nobismhealth | 15 |
|  | @POPPED_Project | 14 |
|  | @SRNCN1 | 12 |

Top 10 by Impressions

| | | |
|---|------------------|--------|
|  | @keeling_michael | 175.9K |
|  | @Irish_RNN | 74.7K |
|  | @GordonHill1 | 58.4K |
|  | @nobismhealth | 47.7K |
|  | @TinkleLin | 33.6K |
|  | @DerekCStewart | 33.0K |
|  | @kdiwavvou | 22.1K |
|  | @uoscares | 15.4K |
|  | @NHSResearchScot | 14.9K |
|  | @Ebevidencia | 13.2K |


Top 10 by Mentions

| | | |
|--|------------------|-----|
|  | @GordonHill1 | 167 |
|  | @SRNCN1 | 93 |
|  | @TinkleLin | 86 |
|  | @Irish_RNN | 55 |
|  | @IACRNUKandIRE | 40 |
|  | @keeling_michael | 37 |
|  | @sharon_kempson | 34 |
|  | @DerekCStewart | 31 |
|  | @POPPED_Project | 26 |
|  | @NHSGrampian | 21 |

Section 2 – Questions and answers:

Welcome slide:



| Question | Responses |
|--|--|
|  <p>Question 1:</p> <p>What are CRN/Ms experiences of working with clinical nurses/midwives?</p> <p>Please begin your answer with A1</p> <p>Remember to include #whywedoresearch in your reply</p> | <ul style="list-style-type: none"> • #whywedoresearch A1 Ooh good question! I think this varies depending on the actual role of the #crnurse and the set up of the study and research delivery at the site • A1: both excellent and challenging. It's wonderful to work with clinical teams that enable research and not gatekeepers #whywedoresearch • A1 Good example are the 14 joint roles now @UHSResNurses split clinical/research or nurse specialist/research #whywedoresearch @southamptonCRF • There are lots of things to consider, if you are a new #crnurse it can take time to get to know the clinical team, to understand their challenges, and to understand the studies you are working on. Lots of communication and being visible helps, but this takes time #whywedoresearch • #whywedoresearch the fear of extra work is very important just now with the pressures that clinical staff are under just now • A1 #whywedoresearch twitterchat - on the whole positive. I think it's our job as researchers to work with clinical teams and make sure research process fits with clinical pathways and create opportunities for good communication & feedback • Buy in from the start is key... Understand why we are doing the research.. And how this will |

| | |
|--|---|
| | <p>the team get used to you it's fine</p> <p>#whywedoresearch</p> <ul style="list-style-type: none"> without excellent communication some clinical staff find it hard to engage and see benefits. #crnurse need to support clinical colleagues. They are OUR patients together #WhyWeDoResearch no not easy to achieve, but spending time with clinical staff, even if not research related helps foster collaboration. time and workload often impinges #whywedoresearch |
| <div style="background-color: blue; color: white; padding: 10px;"> <p align="center">Question 3:</p> <p>How important is the visibility of CRN/MS to the relationship with clinical nurses/midwives?</p> <p>Please begin your answer with A3</p> <p align="right">Remember to include #whywedoresearch in your reply</p> </div> | <ul style="list-style-type: none"> #whywedoresearch - very important if we want better understanding of our role and to support practice based research Very! Research nurses/midwives need to have a visible relationship across all MDTs. #WhyWeDoResearch Can be difficult. For some areas research & clinical staff work in separate buildings or areas so even simple introductions like having lunch together doesn't happen #WhyWeDoResearch out of site is out of mind. Building important relationships to become part of the team is part of the study success #whywedoresearch #whywedoresearch CRNs need to be part of the MDT and sadly this is not the case everywhere. It is a hugely important role of the CRN to change this #whywedoresearch depends a lot on the research projects and setting. Professional networks/forums/meetings could help? Very much depends. But feel it is important that research nurse/midwife introduces themselves, speak to the staff & update them on potential or on-going studies. Need to maintain the relationship for current & future studies #WhyWeDoResearch The #stroke MDT where I worked embraced research.. There was a can do attitude, because it was seen for pt, service and for individual members of the team to be involved in research.. #WhyWeDoResearch We were viewed as an integral part of the MDT :-) |



Question 5:

What strategies do you use to build relationships with clinical nurses/midwives?

Please begin your answer with A5

Remember to include #whywedoresearch in your reply

- **#whywedoresearch** a few examples...? staying back to do bloods for them when they are rushed off their feet in clinic and Phlebs have gone home.
- have enthusiasm, be passionate about your role. These things are contagious...
#whywedoresearch
- I can't emphasise how important this is... it really comes through and its contagious!
#whywedoresearch
- **#whywedoresearch** being present on the unit and helping with their jobs when you are waiting for patients. Building rapport and relationships (sometimes starts with emotional labour) understanding their world to help them understand yours.
- "understanding their world to help them understand yours." Great point across entire clinical research spectrum **#whywedoresearch** so easy and so easily overlooked.
- **#whywedoresearch** (Apart from cake...) Take time to get to know them as individuals, as a person & vice versa. People always work harder for people they like/respect. Remember back at school? You worked harder for the teachers you liked, n'est ce pas? (+ more cake, or gateau)
- we get around @southamptonCRF & support studies everywhere. Pt homes, out pts, schools. Not just in crf. **#whywedoresearch**
- yes. One team. Support each other.
#whywedoresearch
- need supportive structure, education and team behind you **#whywedoresearch**
- support I've structure and education key
#Whywedoresearch
- Need a mix... But to get research embedded in daily activity in all clinical environments.. Every nurse a research nurse.. Every pt has an opportunity.. Maybe a core within areas/directorates with more generic to fill in according to demand?? **#WhyWeDoResearch**